3M™ Digital Library Assistant

User Guide

Built to Exceed Expectations

3M

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3M Library Systems

3M Center, Building 225-4N-14
St. Paul, MN 55144-1000

Overview

The 3M™ Digital Library Assistant (DLA) consists of a handheld RFID reader running DLA software. This battery-powered portable unit offers a comprehensive set of advanced functions that a library can use to efficiently and accurately manage its collection.

- Simplifies otherwise impractical or difficult tasks.

- Helps find data errors in circulation system records.

- Helps find errors in bibliographic records such as incorrect barcodes, call numbers and spine labels.

- Provides a full range of functions for all libraries, including location tag processing if used.

- **Home** screen displays a scrolling menu of DLA functions, which can be customized to include only the functions used by your library. Prioritize the menu by moving most often used functions to the top of the list. Each **Home** screen menu selection is listed below.
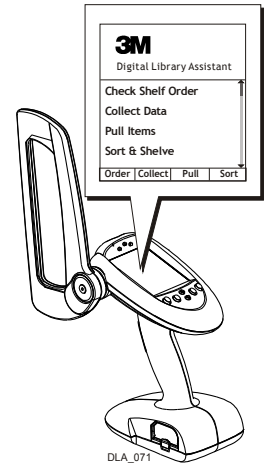
DLA Home screen menu selections

Check Shelf Order (see page 57) - Finds mis-shelved items and graphically shows current position and where they belong. Also provides **Goes Between** information to help shelve misshelved items.

Collect Data (see page 63) - Collects and saves Item IDs to a memory card. After collecting data, use 3M™ Digital Data Manager software to import data from a memory card. Import function creates text files to update your circulation system.

Pull Items (see page 68) – After using Data Manager to export pull lists to a memory card, select a pull list and use this DLA function to locate and pull items. Functions include pulling items that are on hold, or weed items. Data Manager can import pull results (items found or not found) as text files to update your circulation system.

Sort & Shelve (see page 73) – Use to help shelve items by temporarily storing and shelving fine-sorted items, fine-sorting items on a cart and then shelving, or placing unsorted items on a cart and

Shelve Items (see page 82) – Helps you find item shelf locations. Sounds, lights, text and graphics guide you to the correct shelf location, which increases the accuracy of shelving and saves the time typically needed to inspect each call number.

Change Security (see page 85) – Scan an item and change its security status (on/secure or off/unsecure).

Show Item Info (see page 86) – Scan an item and display item ID and other information.

Check Location (see page 88) – *Only for libraries using location tags*. Scan a location tag and an item to check location.

Check Location+Order (see page 89) – *Only for libraries using location tags*. Scan a location tag and multiple items to check location and order.

Inventory Location (see page 90) – *Only for libraries using location tags*. Scan a location tag and all items in that location to check that location's inventory.

Change Battery (see page 98) – DLA goes into "sleep" mode so you can change batteries or remove

then shelving.

Find Items (see page 73) – Quickly find a single item without using Data Manager to create a pull list or search list. This configurable search function finds any item included on one of a memory card's lists.

Search for Items (see page 64) – DLA memory cards can contain search lists that enable the DLA to search for items, and the search function can identify items on user-defined lists such as missing-items lists. Searching can be combined with other tasks, enabling you to locate and gather search items during routine shelf reading or data collection.

the battery to shut off the DLA.

Setup Lists (see page 27) – Allows you to view and activate the lists and collection categories on the memory card.

Setup Options (see page 20) – Allows you to access staff-level setup options such as sound volume, language used and time/date settings. (No password required.)

User Mode Status (see page 29) – Allows you to access the admin-level setup options available on the **Admin** menu. (Password required.)

About DLA – Displays DLA software information such as version number and tag data formats.

Frequently asked questions

How does the DLA know what is out of order, missing, on hold, etc.?

The DLA uses data from your circulation system. 3M provides Data Manager software, which runs on a library-supplied PC, to transfer this data to the DLA. The DLA's accuracy depends on the accuracy of your circulation system data.

How much data can the DLA hold?

Circulation system data is transferred onto a memory card. These are the same type of cards typically used in digital cameras.

- The amount of data stored depends on the size of the memory card. A single 32-MB card can store data for approx. 230,000 items, while a 1-GB card can store data for approx. 7,000,000 items.

- Additionally, you may prepare multiple memory cards and insert the appropriate card into the DLA to work with a specific library section or to search for specific items of interest.

Do I need to tag the entire collection to use the DLA?

The DLA can provide immediate benefits without converting the entire library to tags.

- Initially focus on the problem areas or sections that get the most use. Even when a small section or part of a section is tagged, you receive immediate benefits.

- Tag additional sections while you continue to use the DLA.

Related documents

3M™ Digital Library Assistant User Guide
This guide focuses on setting up and using DLA software.

3M™ Handheld RFID Reader Owner's Manual
Provides information on battery charging and other hardware features.

Before you can use the DLA, you must also be familiar with the functions of Data Manager software as described in the following documents:

3M™ Digital Data Manager Data Format Guide
This guide includes detailed descriptions of the data formats supported by Data Manager software. (This document also includes a separate 3M *™ Digital Data Manager Data Format Worksheet*.)

3M™ Digital Data Manager Installation and Setup Guide
This guide includes instructions on how to set up data format parameters, specify barcode validation parameters, and plan the types of information that the DLA will display.

3M™ Digital Data Manager Staff Guide
This guide includes instructions on how to manage and export the list files that are used by the DLA and other 3M equipment.

Getting Started

This section provides basic instructions on how to set up the 3M™ Digital Library Assistant. The DLA consists of the 3M™ Handheld RFID Reader hardware (Handheld) running DLA software.

DLA hardware components
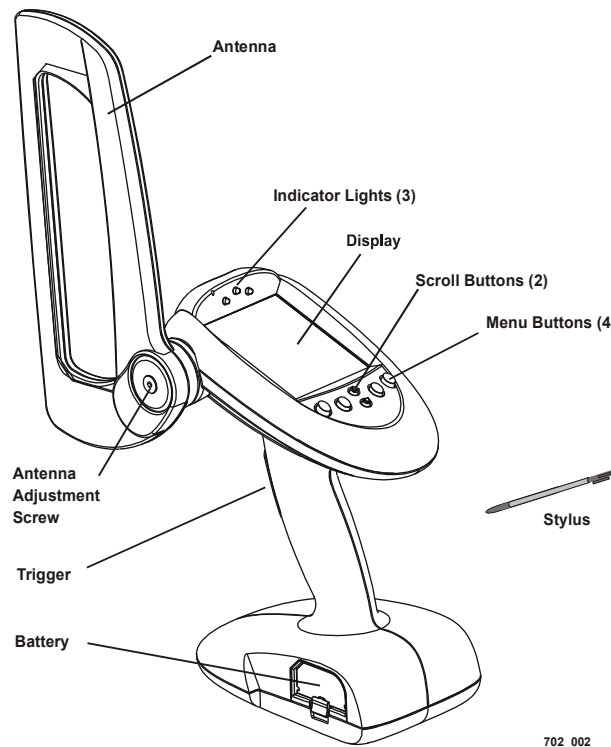
IMPORTANT!

- Be careful not to damage the handheld.

- Do not drop the Handheld.

- Do not leave the Handheld in locations where it might fall.

- Do not leave the Handheld in direct sunlight.

- Do not expose the Handheld to heat.

- Only use the point of the stylus to touch the various buttons and checkboxes on the screen.

- Never use a pen, pencil, or other sharp object on the display screen.

Save all the original handheld packing materials.
You will need the packing materials if you return the Handheld for repair.

Do not over-tighten the antenna adjustment screw.
Over tightening the antenna adjustment screw may damage the Handheld.

Always use the Change Battery function when you change the battery.
If you do not use the Change Battery function when changing the battery, you may lose collected data and/or corrupt the memory card. Also, you may have to reset the Handheld.

Always return to the Home screen before removing the memory card.
This helps avoid corrupting data that you collected with the Handheld and saved to the memory card.

Using DLA front panel controls and indicators

The DLA front panel displays menu selections, checkboxes, drop-down menus, graphics and other specialized software controls.

- Use the scroll buttons to move up or down in menus and lists.

- Use the menu buttons to select menu items that appear at the bottom of the screen.

- Use the stylus to select menu or list items, move the scroll bar, check or uncheck setup screen checkboxes, or select characters from an on-screen keyboard.

- Observe indicator lights to help locate items or shelf positions.
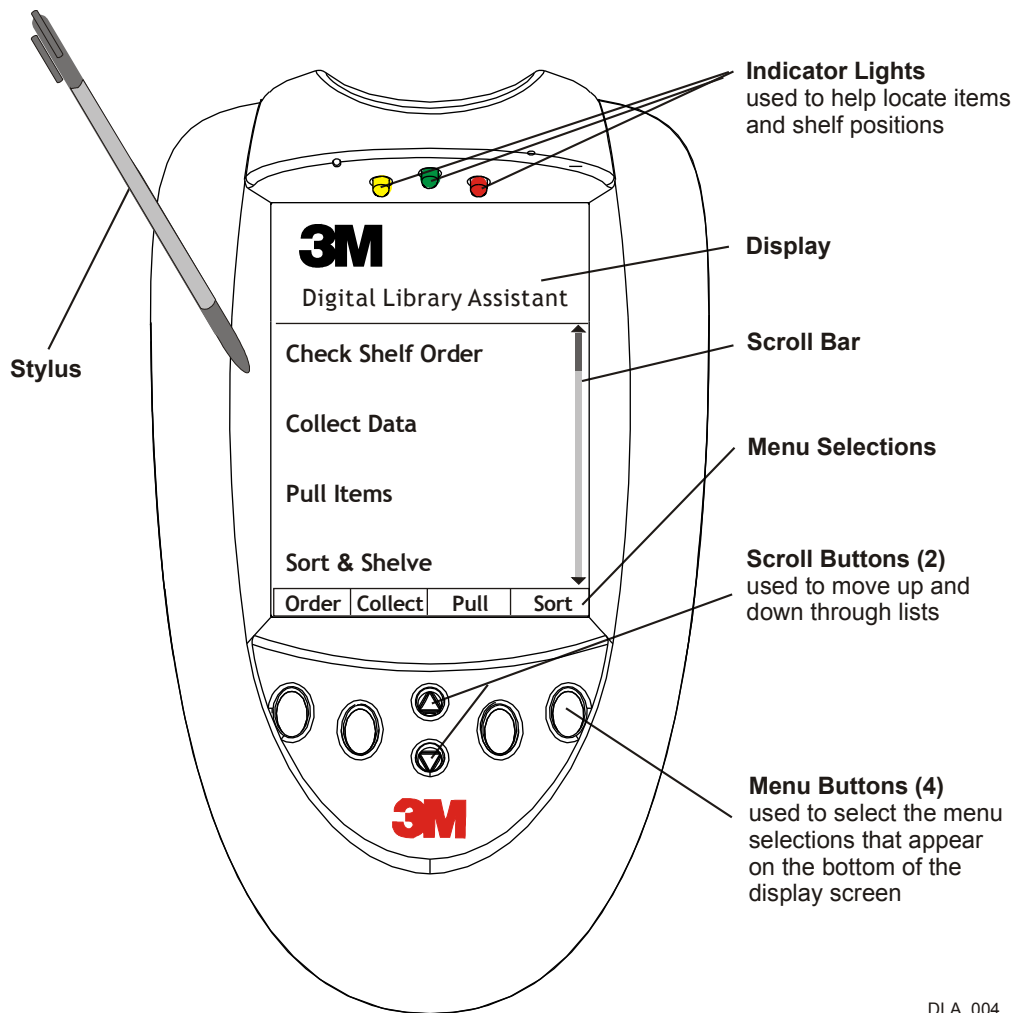
Before using the DLA for the first time

Before you use the DLA, you must complete the following requirements:

Requirement 1—Convert items with 3M™ RFID Tags

The DLA only processes library items equipped with RFID tags.

• The conversion process (tag programming and application) saves the Item ID to the tag's memory chip. The tag is then attached to the item.

• The DLA reads these tags to enable you to perform various tasks such as checking shelf order.

Requirement 2—Use 3M™ Digital Data Manager software to export DLA software, lists and collection categories to a memory card

The Data Manager package includes the software and hardware required to process lists generated from your circulation system and export them onto memory cards. The DLA uses these lists to perform collection-management tasks.

1. Install and set up Data Manager software and DLA software on a library computer.

   See Data Manager documentation for details on how to set up and use Data Manager software.

2. Generate accurate shelf-order lists, search lists and pull lists from your circulation system.

   • Important! If your library uses a location-based shelving system, your circulation system must also generate Location Lists that identify designated locations in the library with location IDs and descriptions.

   • These lists must be text files in one of the formats supported by Data Manager software.

3. Use Data Manager software to export lists and DLA software onto a memory card.

4. Insert the memory card into the DLA.

Requirement 3—Refer to the 3M™ Handheld RFID Reader Owners Manual for DLA start-up procedures

Refer to the 3M™ Handheld RFID Reader Owners Manual for details on how to charge batteries, and information on "Using the Handheld device for the first time."

IMPORTANT!

Read, understand and follow all safety information contained in these instructions BEFORE using the 3M™ Handheld RFID Reader.

Installing DLA software

To install new DLA software, you must export the new software to a memory card and insert the card into the DLA.

ℹ️ The installation process supports both the Handheld Model 702 and Model 802 (Palm platform), and the Handheld Model 803/804 (Windows CE platform).

Overview

1. First install DLA software on the computer you will use to run Data Manager software.

2. Each time you export lists using Data Manager software, the DLA software you installed on the computer will be automatically installed on the memory card.

3. When you insert the memory card into the DLA, a dialog box asks you if you want to update the software with the new version.

Step 1—Install DLA software on your computer's hard drive

Install DLA software onto the hard drive of the computer that you use to run Data Manager software.

1. Insert the 3M™ Digital Library Assistant Software CD-ROM into your computer's CD-ROM drive.

   • An installation program automatically starts.

2. Follow the installation instructions that ask you to select a Destination folder, languages, etc.

   • The installation process copies the DLA program files from the CD-ROM and saves them on your hard drive.

   ℹ️ You can install a maximum of four languages. Be sure to install all languages that you will use. Languages that are not installed at this time will not be available for use on the DLA.

3. When the installation is complete, click **Finish.**

   • The DLA software is now installed on your computer's hard drive.
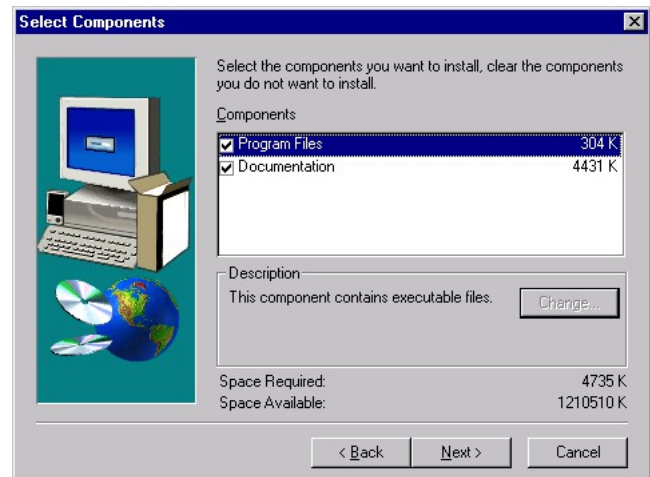
Model 803/804 Only — Optional tag formats

1. After installing DLA software (above): If you wish to use tag formats other than the 3M and generic formats included with the system, insert the 3M™ Optional Tag Formats CD-ROM into your computer's CD-ROM drive.

    • The installation program starts automatically.

2. Follow the instructions on the screen, then click Finish when the installation is complete.

    • The optional tag formats are installed on your computer's hard drive, and you are able to select specific formats from the DLA.
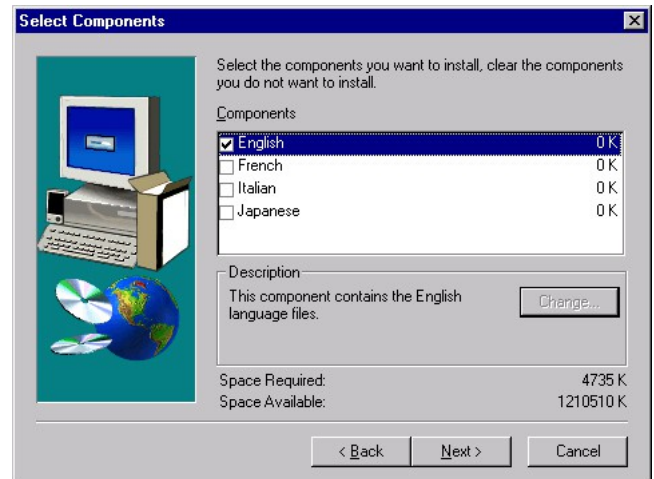
Step 2—Install DLA software on the DLA

1. Make sure that you installed DLA on the computer used to run Data Manager. (See Step 1 —Install DLA software on your computer's hard drive on page 15.)

2. Use Data Manager to export lists and/or collection categories to a memory card.

   • During each export operation, Data Manager automatically exports DLA to the memory card.

3. Insert the memory card into the DLA.

   a) The DLA compares the software version currently running on the DLA to the version on the memory card.

   b) The Install DLA Software dialog box appears on the DLA if the software on the memory card is newer than the version installed on the DLA.

4. Press **Yes** to install the new software.

   • Press **No** to cancel the DLA software installation and return to the DLA Home screen.

5. At the Preferences screen, press the trigger for approximately one second and release.

   • The DLA Home screen appears.
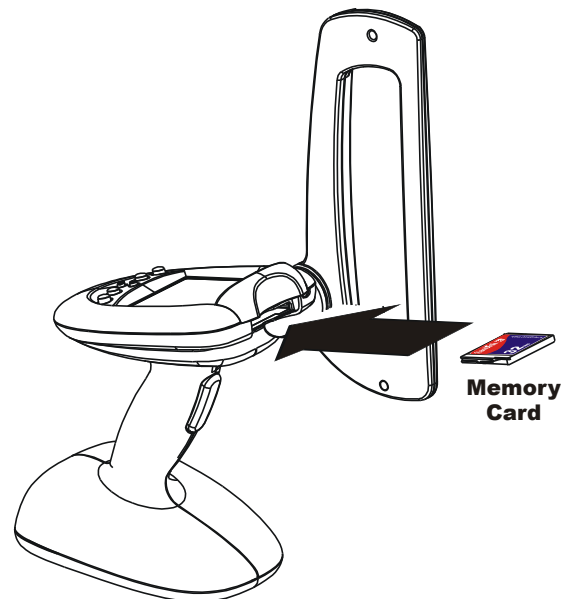
Memory Card

Install DLA Software?

New DLA software is available on the memory card.

Do you want to install the new software?

| Yes | No | | |

DLA_003

DLA reset procedure

If the DLA screen locks up or stops working, you need to reset the DLA.

i A fully discharged battery may cause a blank screen.

To reset the DLA

As described below, the reset procedure is different for the Model 803/804 and Models 702/802 Handheld models.

i The Handheld model number appears on the label on the bottom of the DLA base.

Handheld Model 803/804 reset procedure

1. Insert a memory card (with DLA on it) into the DLA.

2. Press and hold the reset button for approximately one second.

3. The DLA loads.

4. The Home screen appears.

Handheld Model 702 and Model 802 reset procedure

1. Insert a memory card (with DLA software on it) into the DLA.

2. Press and hold the reset button for approximately one second.

   The **Preferences** screen appears.

3. Press the trigger.

   The DLA loads.

4. At the **Set Clock** screen, set the correct time and date.

5. Press **OK.**

   The Home screen appears.

Reset Button

Model Number

COM/STATUS
U.S. Pat. No. 6486780, U.S. Pat. No. 6232870
U.S. Pat. No. 6448886, U.S. Pat. No. 6768419
U.S. Pat. No. D470847
Model 803
FCC ID: DGF-LSD702
CANADA: _____
S/N: 803XXXX
PWR
3M Security Systems Division
St. Paul, Minnesota 55144

CE c(UL)us LTE. LISTED 4P24

N1108
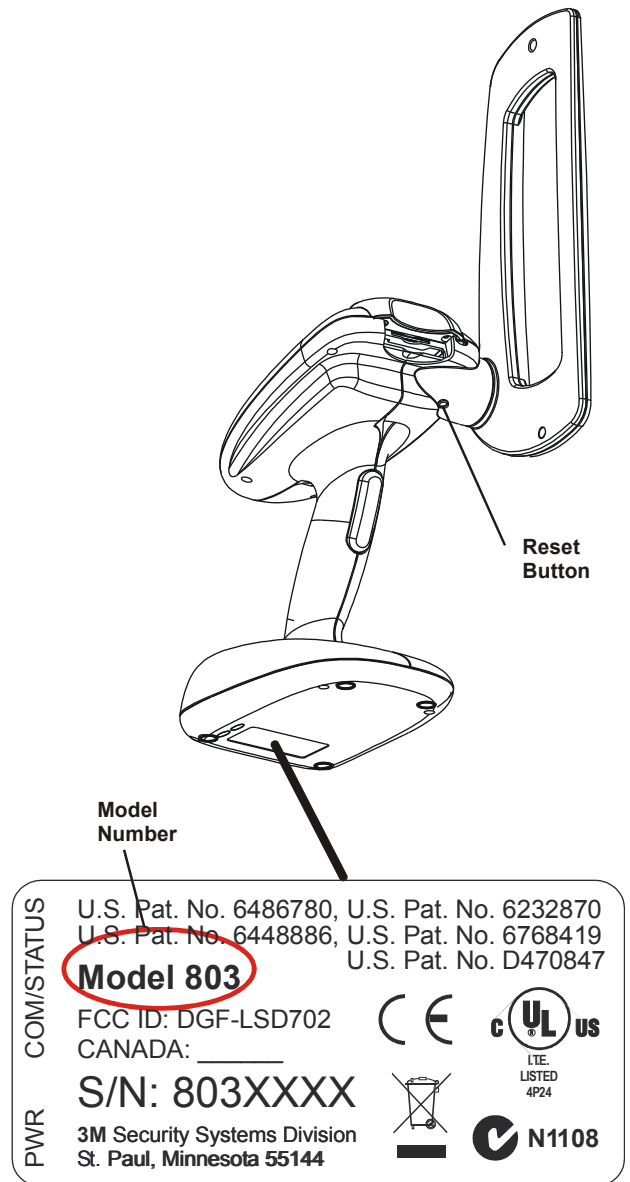
DLA_087

Staff-level setup options

Accessing staff setup options

The Setup Options and Setup Lists screens listed below provide staff-configurable options that allow you to customize DLA operation. No password is required to access or modify these options.

To display the Options screen

1. Use the scroll buttons to move down the list on the Home screen until you see the Setup Options selection.

2. Press the **Options** button.

   The Options: General screen appears.

To change a setting

1. Use the DLA stylus to tap the drop-down menu icon (▼) to display a menu.

2. From the menu, use the stylus to select the new setting.

   The menu closes and the new setting appears.
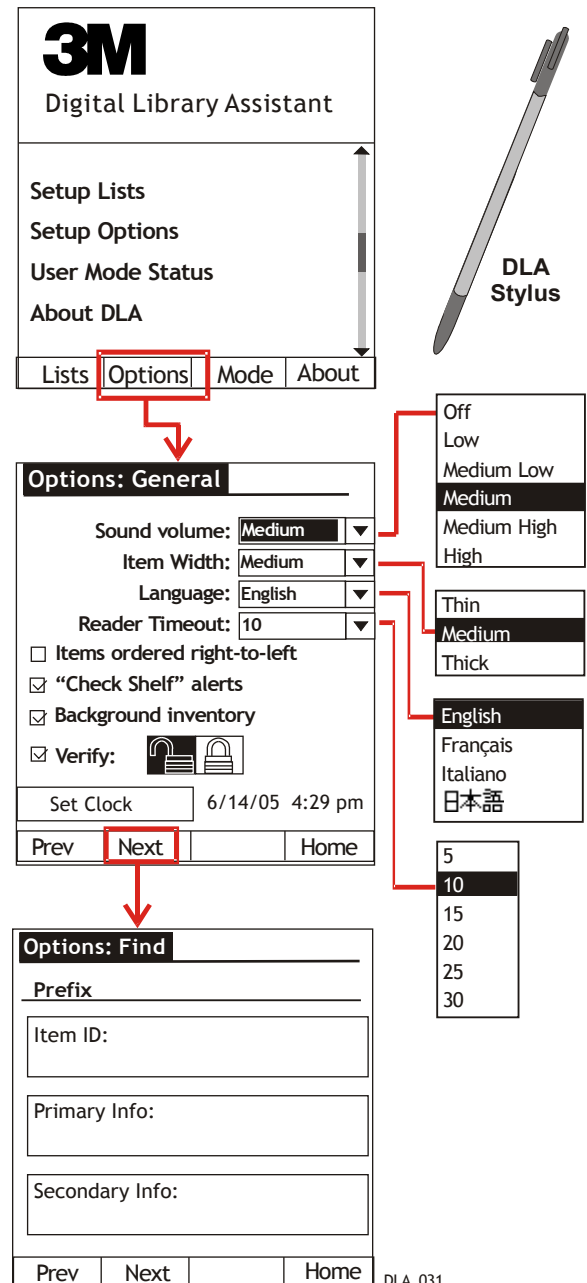
Setting general options

Use the Options: General screen to customize the operation of the DLA.

Adjusting the sound volume

Use the **Sound volume** setting to adjust the volume of the DLA pacing and alert sounds.

From the pop-up menu, use the stylus to select the desired setting.

The menu closes and the new setting appears.

After you select a sound volume setting, the DLA plays a series of beeps at the new volume.

🛈 If you are using the Handheld Model 803/804, you can also use the **Options** menu to adjust the sound volume.

Options: General	
Sound volume:	Medium ▼
Item Width:	Off
Language:	Low
Reader Timeout:	Medium Low
☐ Items ordered righ	Medium
☑ "Check Shelf" aler	Medium High
☑ Background invent	High
☑ Verify:	🔓 🔒
Set Clock	6/14/05 4:29 pm
Prev	Next		Home

DLA_041

Changing the item width setting

You can change the Item Width setting to match the thickness of the items that you are reading.

- Use the Medium setting for most applications.

- You may want to select the Thin setting if you are working with large groups of thin items. This reduces the number of shelf-order errors reported for items that are in the correct position.

If you use the "thick" order-limit setting for thin items,
you may encounter excessive false shelf-order errors for items that are in the correct position.

If you use the "thin" setting for normal or thick items,
you may notice reduced accuracy (some detectable shelf-order errors may not be reported).

Options: General	
Sound volume:	Medium ▼
Item Width:	Medium ▼
Language:	Thin
Reader Timeout:	Medium
☐ Items ordered righ	Thick
☑ "Check Shelf" alerts	
☑ Background inventory	
☑ Verify:	🔓 🔒
Set Clock	6/14/05 4:29 pm
Prev	Next		Home

DLA_042

Item width recommendations

Thin – less than ½ inch (1.5cm) thick

Medium – ½ inch to 1 ½ inches (1.5 to 4cm) thick

Thick – greater than 1 ½ inches (4 cm) thick
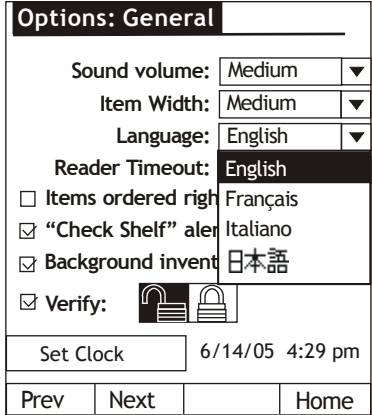
Note: For instructions on how to customize the Item Width settings (thin, medium, thick), see Setting order limits on page 32.

Selecting a language

You can display the DLA's user interface in different languages.

While in the Options: General screen, use the stylus to open the Language pop-up menu and select a language.

i   Only the languages that you selected when you installed DLA software on the Data Manager computer will appear in the Language pop-up menu.
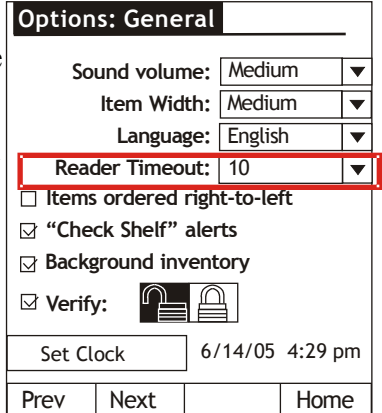
```
Options: General

       Sound volume:  Medium      ▼
         Item Width:  Medium      ▼
          Language:   English     ▼
     Reader Timeout:  English
  □ Items ordered righ Français
  ☑ "Check Shelf" aler Italiano
  ☑ Background invent 日本語
  ☑ Verify:        🔒 🔓

    Set Clock      6/14/05  4:29 pm

   Prev   Next              Home
```
DLA_032

Changing the Reader Timeout setting

This setting only affects the trigger lock feature. The reader timeout setting determines how quickly the DLA releases the trigger-lock function. (See Using the DLA trigger lock on page 51.)

When the DLA trigger lock is activated, if the DLA does not read a new tag within the time selected in the reader timeout menu, the trigger lock shuts off and the DLA stops trying to read tags.

i   The reader timeout range is from 5 to 30 seconds.
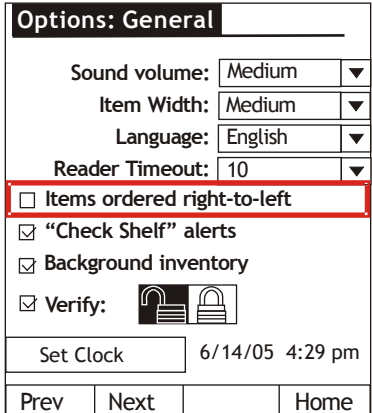
```
Options: General

       Sound volume:  Medium      ▼
         Item Width:  Medium      ▼
          Language:   English     ▼
     Reader Timeout:  10          ▼
  □ Items ordered right-to-left
  ☑ "Check Shelf" alerts
  ☑ Background inventory
  ☑ Verify:        🔒 🔓

    Set Clock      6/14/05  4:29 pm

   Prev   Next              Home
```
DLA_044

Changing the Items Order Right-to-left setting

If your library stores items in right-to-left order, select the Items ordered right-to-left checkbox.

```
Options: General

       Sound volume:  Medium      ▼
         Item Width:  Medium      ▼
          Language:   English     ▼
     Reader Timeout:  10          ▼
  □ Items ordered right-to-left
  ☑ "Check Shelf" alerts
  ☑ Background inventory
  ☑ Verify:        🔒 🔓

    Set Clock      6/14/05  4:29 pm

   Prev   Next              Home
```
DLA_044

Enabling Check Shelf alerts

During the Check Shelf Order function, the DLA displays Checkshelf alert messages that can help you identify items that may belong on a different shelf (even though they are in the correct shelf order for the shelf that you just scanned).

"Checkshelf" items appear near the beginning or end of the shelf.

i   You may want to disable (uncheck) the "Check Shelf" alerts checkbox to avoid excessive alert messages when checking the shelf order of shelving carts.

If you read a shelf where a patron misplaced a book near the end of the shelf and, the book's correct shelf location is after the shelf that you just read.

The book is in the correct shelf order (at the end of the shelf you just read) but it may not be in the correct location. The DLA will display an alert message and you can determine if you must re-shelve the book.

If you read a shelf where a patron misplaced a book near the beginning of the shelf and, the book's correct shelf location is before the shelf that you just read.

The book is in the correct shelf order (at the beginning of the shelf you just read) but it may not be in the correct location. The DLA will display an alert message and you can determine if you must re-shelve the book.

If, while reading a shelf, you accidentally move the DLA into an adjacent shelf (left or right), the DLA may read one of the books on the adjacent shelf.

The book was detected in the correct shelf order but it is located on an adjacent shelf.

The DLA will display an alert message and you can determine if the book is correctly shelved.

Adjust your scanning technique to avoid accidentally reading items on adjacent shelves.

Enabling Backgound inventory

Select (check) the Background inventory checkbox to save the Item ID of each tag read while using other DLA functions (such as Check Shelf Order).

- The Background inventory checkbox only appears if you selected User choice in the Admin Settings screen.

- The Item IDs read while background inventory is active are always saved in the Inventory category.

- To view the number of Item IDs saved in the Inventory category, select the Setup Lists function from the Home menu.

  i   The Background Inventory function does not collect Item ID location information, if used.

Changing the Verify setting

With the Verify option enabled, the DLA can identify the security status of items while performing other DLA functions (such as Check Shelf Order). This option can be configured to detect either unsecured items or secured items (not both).

i The **Verify** option is only available at sites that use ISO tags to provide RFID Security.

Enabling the Verify option

To use the Verify option, you must first enable the option and define the type of security status that you want the DLA to identify (secured item or unsecured item).

i The Verify option only appears if your site uses RFID Security. If a tag protocol that does not support RFID Security (e.g., D1) is selected, the Verify option will not appear in the Options screen. For information on setting Tag Protocol, see Changing the Tag Protocol setting on page 34.

1. From the main DLA screen, press **Options.**

2. To enable the Verify option, select the **Verify** checkbox.

3. Select one of the two verify icons to select the type of security status that you want to identify.

   • Select the unsecured icon 🔓 if you want the DLA to alert you if it reads an item whose security status is unsecured.

   • Select the secured icon 🔒 if you want the DLA to alert you if it reads an item whose security status is secured.

4. Press **Home**.

Options: General

Sound volume: Medium ▼
Item Width: Medium ▼
Language: English ▼
Reader Timeout: 10 ▼
☐ Items ordered right-to-left
☑ "Check Shelf" alerts
☑ Background inventory
☑ Verify: 🔓 🔒

| Set Clock | 6/14/05 4:29 pm |
| Prev | Nex | | Home |

To enable the verify option, select the Verify checkbox and define what type of item security (secured or unsecured) that the DLA will detect.

☑ **Verify:** 🔓 🔒

Display 🔓 icon if an unsecured item is read

Display 🔒 icon if a secured item is read

DLA_076

Identifying security status

The DLA will identify a particular security status much the same way that it identifies items that are o n an active search list.

• The DLA emits a series of beeps each time it reads an item that meets the verify criteria (secured or unsecured) that you defined in the Options screen.

• In addition, the DLA displays a verify icon next to the item. The icon displayed depends on if the option is configured to detect secured or unsecured items.

i If an item meets the verify criteria and it is also on an active search list, the search list name appears in place of the verify icon.

Collect Data

0/3 Press Trigger To Begin

Queen Lear
PS3515.E42.A698 V.1

The Poisoned Orchard
PS3515.E42.B765 V.1 🔓

| Clear | | Save | Home |

Verify icon
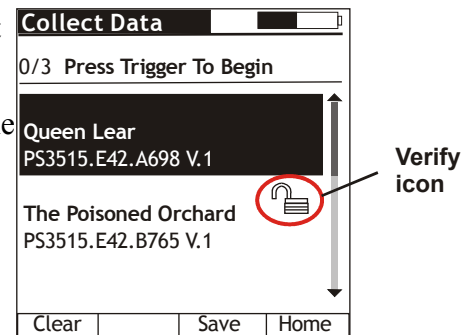
DLA_077

Changing the Time and Date settings

Handheld Model 803/804

1. From the Home screen, press **Options.**

2. Use the stylus to tap the **Set Clock** button.

3. In the **Set Clock** dialog box, set the time, date, and time zone.

   • If your location switches to daylight savings time, select the **Automatically adjust time for daylight savings changes** checkbox.

   • The time zone and daylight savings time settings are only available on the Model 803/804.
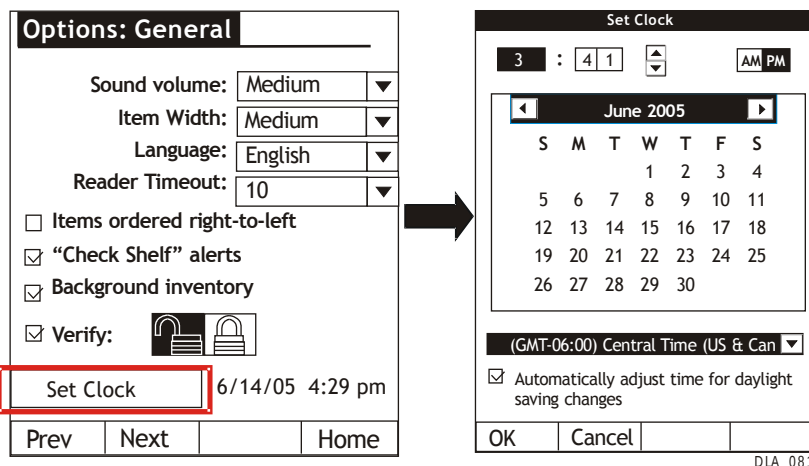
i You also may tap the date/time display in the upper right corner of the Home screen to adjust date and time.

Handheld Mode 702 and Model 802

The time zone and daylight savings time settings are not available on the Model 702 and Model 802.
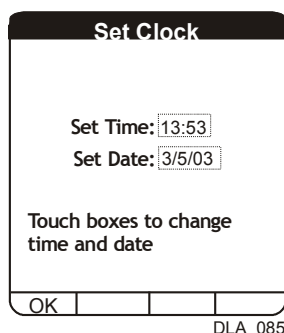
Setting screen contrast

Handheld Model 803/804

1. From the Options screen, tap **Next** until the contrast screen appears.

2. Use the stylus to move the **Adjust Contrast** slider to optimize the screen contrast.
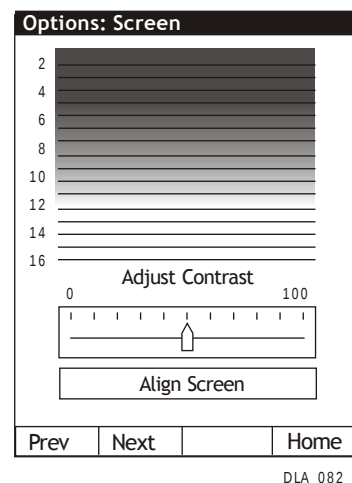
Handheld Model 702 and Model 802

1. Enter administrator mode.

2. From the **Admin** menu, tap **Contrast Test**.

3. Tap the contrast icon (⬤) located in the lower portion of the screen.

4. Use the slider to change the screen contrast.
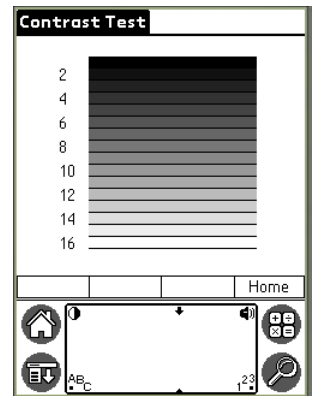
Setting screen alignment

Handheld Model 803/804

If, while using the stylus on the DLA screen, the various screen targets (drop-down list icons, etc.) appear out of alignment, you can use the Align Screen feature to recalibrate the screen.

1. From the DLA Home screen, select **Setup Options**.

2. Press the **Next** button until the Options: Screen appears.

3. Tap the **Align Screen** button.

4. Follow the on-screen alignment instructions.
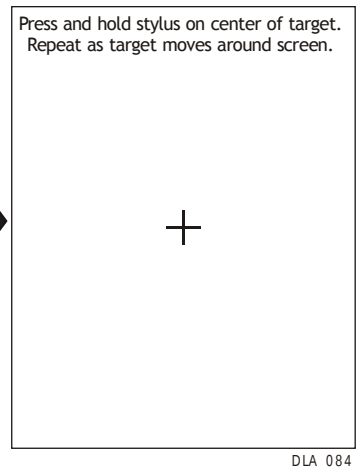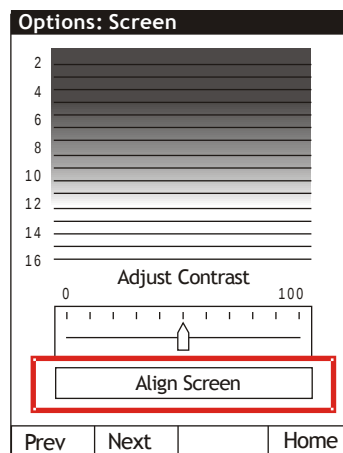
Handheld Model 702 and Model 802

1. Remove the battery for approximately five minutes.

2. Insert a memory card with DLA software on it into the DLA.

3. Insert the battery into the handheld.

4. Press the **Reset** button (located on the bottom of the handheld near the antenna).

5. Follow the instructions to calibrate the screen using the handheld stylus.

6. At the Country/Date/Time screen, tap **Next**.

7. At the Setup Complete screen, tap **Done**.

8. Press and release the trigger.

9. At the Preferences screen, press and release the trigger to display the Set Clock screen.

10. Set the time and date.

11. Press **OK**.

    The DLA Home screen appears.

Setting the find function default prefix

When you select the **Find** option from the main menu, any default prefix that you define appears in the find field(s).

You can set a default find **Prefix** for each of the find field selections (**Item ID**, **Primary Info**, **Secondary Info**).

You can leave the prefix fields blank.

To set a default prefix (Handheld Model 803/804)

1. From the Options screen, press **Next**.

2. Use the DLA stylus to tap any of the three fields (**Item ID**, **Primary Info**, and **Secondary Info**).

3. Use the stylus to enter the desired prefix.

4. Tap **OK**.

   Whenever you use the Find function, any default prefix that you assign will appear in the appropriate box.

To set a default prefix and keyboard type (Handheld Model 702 and Model 802)

The procedure for setting a default find prefix for an older Handheld Model 702 and Model 802 is essentially the same as the Handheld Model 803/804.

The main difference is that you can assign a default keyboard type (abc, 123, or Int) for each of the three find-criteria fields available in the Find function.

When using the Find function, the default keyboard is the keyboard type that first appears when you tap one of these fields.

Example: If you often if you often perform finds of items using Item IDs, you might enter the first few characters of your branch's barcode (e.g., 3114700) as an Item ID prefix. This saves you from typing "3114700" each time you need to find one of these items.

Using the Setup Lists screen

The Setup Lists screen allows you to view and activate the lists and collection categories on the memory card.

The **Items** column displays the number of items contained in each list or category.

The **Date Loaded** information displays the date/time when Data Manager software exported the lists to the memory card.

The checkbox in front of each search list allows you to select the search lists that you want to be active while using the DLA.

i All search lists are selected each time a memory card is inserted into the DLA.

DLA Lists

Data Manager software is used to create various lists from extracted circulation system data, and export selected lists onto a memory card that is used by the DLA.

Order lists – a list of items in shelf order—in the order that they should appear on the shelf (required for the Check Shelf Order, Shelve Items, and Sort and Shelve functions).

Search lists – a list of items the library would like to find (the order does not matter). These lists can include missing or lost items, etc. (required for Search for Items function).

Pull lists – a list of items (hold lists, weed lists, etc.) that you intend to pull (required for the Pull Items function).

Collection categories – the Collection Category labels that you created in Data Manager software and exported to the memory card (required for the Collect Data function).

The DLA's **Save** function allows you to save the Item IDs of any currently displayed items to a specific category.

Deactivating search lists

All items on any active (checked) search list will be searched for during the Search for Items, Check Shelf Order, Collect Data, Pull, Find, and Sort & Shelve functions.

i All search lists are selected each time a memory card is inserted into the DLA.

1. From the Home screen, press the **Lists** button.

   The Setup Lists screen displays the order lists, search lists, and collection categories on the memory card.

2. Use the DLA stylus to clear (uncheck) the checkbox of any search list that you want to deactivate.

   You can press **Check all** or **Uncheck** to select or clear all the lists at the same time.

Viewing collection categories

Scroll down the Setup Lists screen to view the collection categories on the memory card.

- The Items column displays the number of Item IDs that you have saved in each of the collection categories.

- The Inventory collection category displays the number of Item IDs collected when the Background Inventory function was active.

Setup Lists	
Pull Lists	**Items**
Hold	22
Weed	42
Collect Lists	**Items**
In House	78
Default	43
Inventory	2,343
Data Loaded:	**11/15/01 9:35**
Check all	Home

DLA_008

Administrator level setup options

The password-protected administrator mode enables access to the **Admin** menu, where you can configure and customize administrator level DLA setup options.

Accessing the Admin menu

1. Enter Admin mode.

   a) From the Home screen, press **Mode**. The User Mode Status screen appears.

   b) Select **Change Mode**. The Change Mode Password screen appears.

   c) Use the stylus to type the password on the onscreen keyboard, then select **OK**.

   d) On the User Mode Status screen, press **Home** to go to the Home screen.
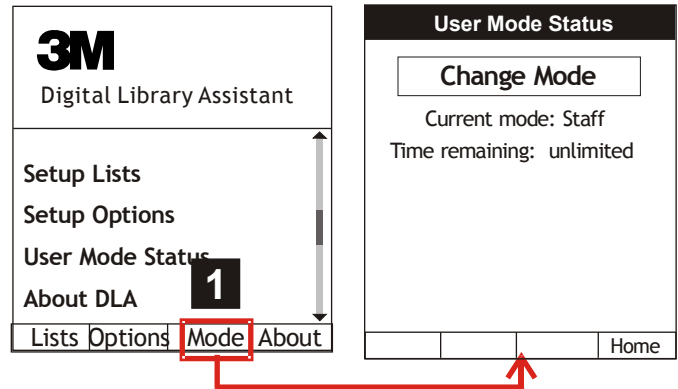
2. Use the stylus to touch the menu bar area (the upper portion of the DLA screen).

   The **Admin** and **Options** menus appear.

3. Select administrator DLA setup options from the menu.

   The following topics provide detailed descriptions of all setup options accessible from the **Admin** menu.

   i To return to the Staff mode, select **End Admin Mode** at the bottom of the **Admin** menu.
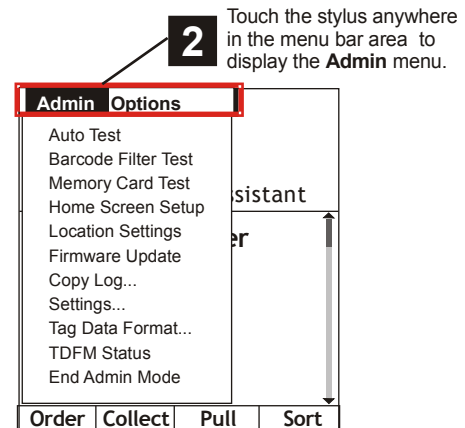
Using the administrator setup options

First access the administrator mode as described above, then use the **Admin** menu selections as described on the following pages.

i On many (but not all) Admin-level screens, if you wish to exit from an **Admin** menu function and you want to remain in the Admin mode, use the stylus to touch the menu bar area (the upper portion of the DLA screen). The **Admin** menu appears, where you can select another option from the menu.

Auto test option

This option scrolls through a series of automatic tests to check DLA hardware functions.

Barcode filter test option

This option enables you to enter a barcode and then verify how the barcode filter (created in Data Manager software and exported to the memory card) modifies the barcode.

Memory card test option

This option automatically checks the memory card interface and contents. Information including software version, languages and font types are displayed.

Home screen setup option

This option enables you to add, remove and rearrange the selections that will be available on the Home screen menu:

* To add a selection to the menu, use the stylus to touch the space to the left of the selection. A checkmark will appear.

* To remove a selection from the menu, use the stylus to touch the checkmark to the left of the selection. The checkmark will disappear.

* To move a selection up or down in the menu, first tap the selection to highlight it, then use the stylus to touch the Down or Up button to move your selection up or down in the menu list.

IMPORTANT! As shown in the example, if your library does not use location tags be sure to leave the bottom three selections unchecked. If your library uses location tags, be sure to include those selections (Check Location, Check Location+Order, Inventory Location) in your Home screen menu.

Allow blank tags in Change Security

Enable this feature to allow the DLA to set the AFI value for blank tags to either *secure* or *unsecure* using the Change Security function.

* If a tag is not programmed (the tag is blank), the value stored in the AFI memory location on the tag is typically set to 0x00 by the tag manufacturer. RFID detection systems searching for specific AFI values other than 0x00 will indicate that such a tag is *unsecured*, thus not triggering an alarm.

* If not enabled, the DLA will not change the AFI value for blank tags.

Location settings option (location ID users only)

This option provides two checkboxes that enable you to:

* Display or do not display the location description with each scanned item.

* Clear or do not clear your current location information after you select **Save**.

To toggle the checkmark (select/unselect an option), use the stylus to tap the

checkbox.

Contrast test option (Models 702/802 only)

This option enables you to adjust the screen contrast for Model 702/802 units.

Firmware update option (Models 803/804)

This option (Firmware Update for Model 803/804, Firmware Upgrade for Models 702/802) is only used with a 3M firmware update kit. The instruction sheet included with the firmware update kit contains detailed instructions on how to update the firmware.

i   During this process a firmware update utility is launched which locates new reader firmware on the memory card and then updates the DLA's firmware.

Copy log option

IMPORTANT!   Do not use this option unless directed to by 3M Technical Service.

Admin settings option

To access the Admin Settings screen, first enter the Admin mode and then select the **Settings**… option in the **Admin** menu.

The options available on the Admin Settings screen are described on the following pages.

DLA_045b
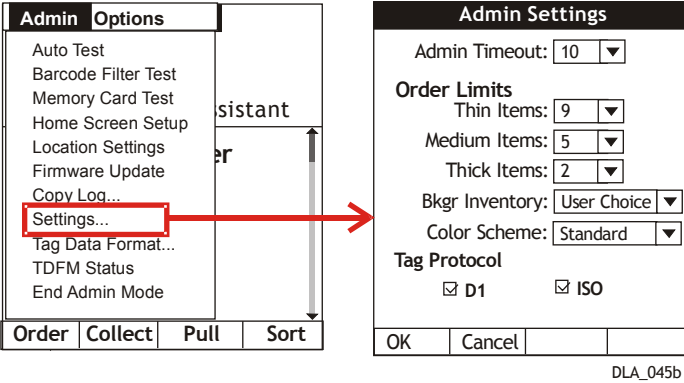
Setting the Admin Mode timeout

This option enables you to define the amount of time (in minutes) that the DLA will remain in Admin mode before reverting to Staff mode.

DLA_035a
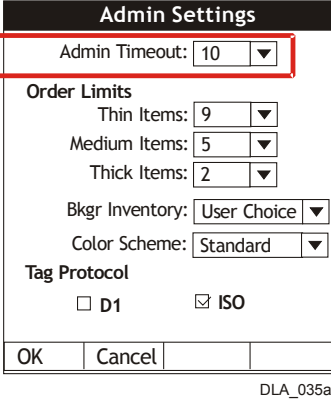
Enabling the Background Inventory function

Use the **Bkgr inventory** setting to define how the Background Inventory setting appears in the Options: General screen.

- With background inventory enabled, as you use the DLA, the DLA collects Item IDs from each tag that the DLA reads and automatically saves them in the Inventory category.

- When Data Manager software imports the collection data, the background-inventory text files are saved to the Inventory collection category.

- To check the number of Item IDs stored in the Inventory category, select **Setup Lists** from the Home screen.

i   Data Manager software automatically creates the Inventory collection category on the memory card. This category is reserved for background inventory only.

Background inventory settings

User choice – Allows staff to turn background inventory on and off from the Options: General screen.

Always on – Keeps background inventory on all the time, and removes the Background Inventory selection from the staff Options: General screen. This ensures that staff cannot inadvertently turn the background inventory function off.

Always off – Keeps background inventory off all the time, and removes the Background Inventory selection from the staff Options: General screen.

Setting order limits

Order Limit settings define the order limit range for each of the three Item Width settings (thin, medium, and thick) that appear in the Options: General dialog box.

To access the Order Limits settings, enter Admin mode and select **Settings** from the **Admin** menu.

Any shelf-order errors that occur within the order limit range will not be reported.

Example: If the order limit range is set to four, the order-limit range extends four items on both sides of a misshelved item.

- Errors are reported if the misshelved item is five or more items away from its correct location (outside

order-limit range).

• Errors are NOT reported if the misshelved item is four or fewer items away from its correct location (inside order-limit range).

ℹ️ Incorrect Order-limit settings may cause excessive shelf-order errors or reduced accuracy. (See Item width recommendations on page 20 for more information.)

Recommended order limit values

You should enter order-limit settings that approximate the number of items that will fit in four inches (10 cm) of shelf space.

• Thin—9

• Medium—5

• Thick—2

ℹ️ 3M recommends using the Medium setting for most Shelf-order tasks.

Order Limit Range

(4 items)

Shelf-order Error Not Reported

1 2 3 4 5 6 **8** 7 9 10 11 12 13

Misshelved item ⟶

Correct Location
(1 item away from current location)

Order Limit Range

(4 items)

Shelf-order Error Reported

1 **8** 2 3 4 5 6 7 9 10 11 12 13

⟵ Misshelved item

Correct Location
(6 items away from current location)

DLA_021
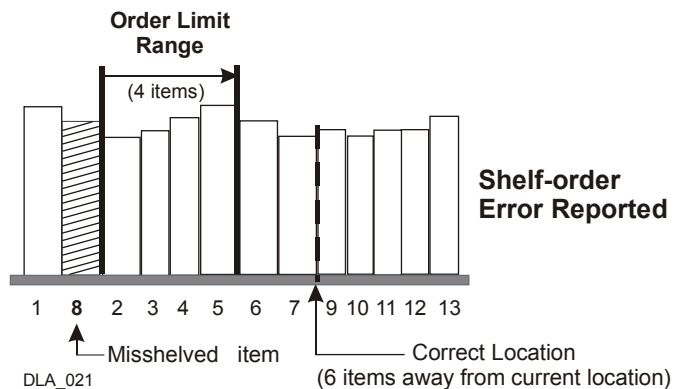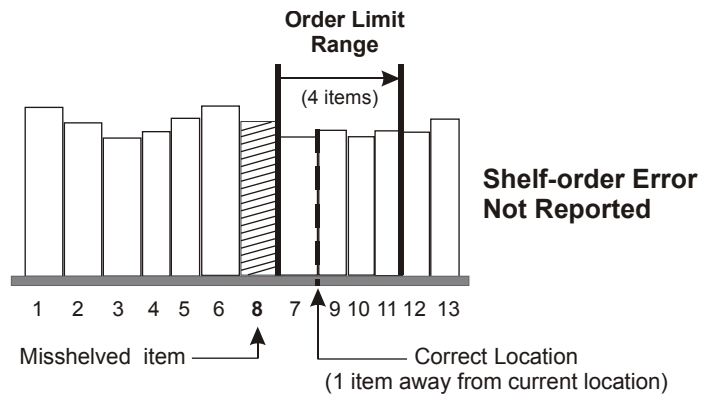
Changing the Color Scheme (Model 803/804)

To change the color scheme for the DLA screen:

1. Enter Admin mode.

2. From the Admin menu, select **Settings**.

   The Admin Settings screen appears.

3. From the **Color Scheme** drop-down list, select a color scheme.

4. Press **OK**.

Admin Settings

Admin Timeout: 10 ▼

Order Limits
Thin Items: 9 ▼
Medium Items: 5 ▼
Thick Items: 2 ▼

Bkgr Inventory: User Choice ▼
Color Scheme: Standard ▼

Tag Protocol
☐ D1   ☑ ISO

OK | Cancel

DLA_035b

Changing the Tag Protocol setting

Set the Tag Protocol setting to the type(s) of 3M™ RFID Tags that are used at your site. The default setting is ISO.

1. Enter Admin mode.

2. From the **Admin** menu, select **Settings.**

   The Admin Settings screen appears.

3. Under **Tag Protocol**, select the type of RFID tags used at your site (D1 and/or ISO).

   • If D1 is the only protocol selected, the **Verify** option will not appear in the Options screen.

   • If your site uses both D1 and ISO tags, select both checkboxes.

DLA_035c

Tag Data Format option (Model 803/804)

Use this Admin function to select tag security methods and other parameters, select tag formats, and arrange tag format priority.

1. Enter Admin mode.

2. Use the stylus to touch the menu bar area (the upper portion of the DLA screen) to display the **Admin** menu.

3. From the **Admin** menu, select **Tag Data Format**. A screen with two tabs appears.

   • Use the **Settings** tab to select tag security protocols and other parameters (if used).

   • Use the **Tag Formats** tab to enable/disable specific tag formats, and to set tag format priority.

DLA_059q

   Note: For optimal performance, only the formats used in your library should be enabled (disable all unused formats in the list). Also, use the up/down buttons to give the most frequently used formats the highest priority, with blank and ignore formats at the bottom of the priority list.

TDFM Status option (Model 803/804)

Use this Admin function to view the current status of tag formats loaded in the DLA.

1. Enter Admin mode.

2. Use the stylus to touch the menu bar area (the upper portion of the DLA screen) to display menu.

3. From the **Admin** menu, select **TDFM Status**.

   The current status of all tag formats loaded in the DLA is displayed.

Admin Options
Auto Test
Barcode Filter Test
Memory Card Test
Home Screen Setup
Location Settings
Firmware Update
Copy Log...
Settings...
Tag Data Format...
TDFM Status
End Admin Mode

DLA_059q

End Admin Mode option

To return to Staff mode, select **End Admin Mode** at the bottom of the **Admin** menu.

Shelf reading basics

This section describes various shelf-reading techniques necessary for the successful operation of the DLA.

Straightening the shelf

1. If possible, arrange the fronts of the books in a reasonably straight line.

   Books that are pushed toward the back of the shelf may be difficult to read.

2. Try not to have any tilted books.

   If the books are tilted, you must tilt the DLA so that the antenna is always parallel to the book spine.

Books that are pushed toward the back of the shelf may be difficult to read.

Try to align the front of the books in a reasonably straight line.

DLA_064
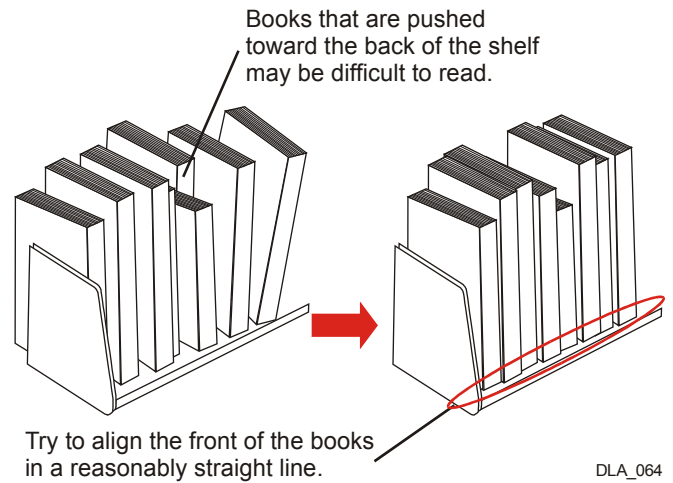
Aligning the antenna

Keep the DLA's antenna correctly aligned at all times.

- Keep the antenna parallel with the spine of the book.

- Align the bottom of the antenna with the bottom of the book.

- If the books are tilted, tilt the antenna.

Keep the front and side of the antenna parallel to the book.

Antenna

Align the bottom of the antenna with the bottom of the book.

DLA_072
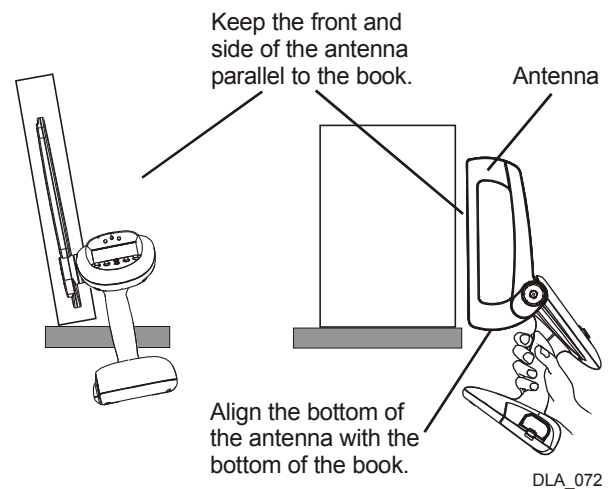
Adjusting the antenna

Adjust the antenna to keep it correctly aligned while
working at shelves with different heights.

• The antenna pivots to allow you to read upper
  and lower shelves.

• The bottom edge of the antenna should line up
  with the bottom of the item.
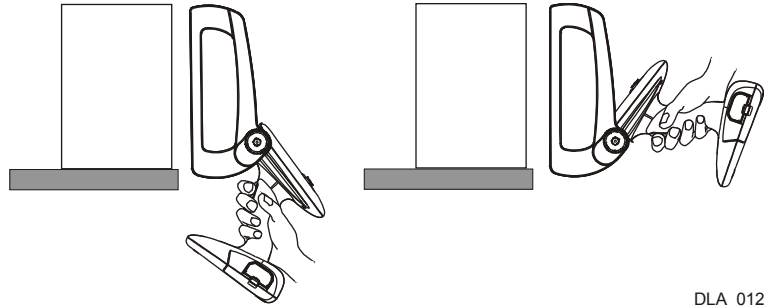
DLA_012

Separating the tags from metal

A vertical metal surface may affect the DLA's shelf-reading accuracy.

Method 1—create a gap between the metal and the book

If the left side of a book is against a metal surface, you need to separate
it by about 0.5 inch (1.3 cm).

• Make sure that there is a finger's-width gap (approximately 0.5 inch,
  1.3 cm) between any metal structure (e.g., shelf divider) and the first
  item on the left-hand side of the shelf.

• Create a gap on the left side of any book that is next to a metal
  surface (such as a metal shelf divider located in the middle of the
  shelf).

.5 in.
(1,3 cm)
Gap
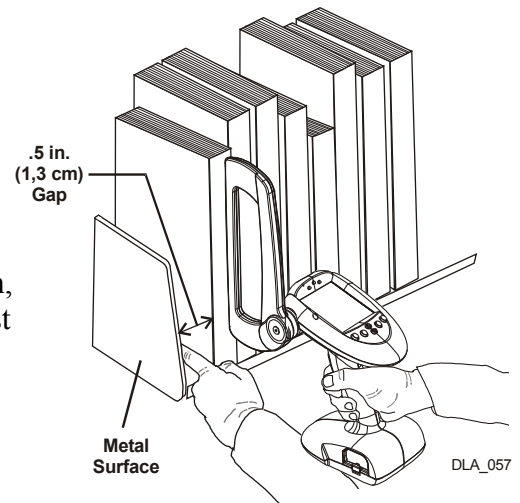
Metal
Surface

DLA_057

Method 2—pull any item that is against metal approximately 2.5 inches (6,35 cm) out from the shelf

If the left side of a book is against a metal surface, pull the item out away
from the shelf a minimum of 2.5 inches (6,35 cm) as you begin scanning
the shelf.

This helps ensure that the DLA reads the first item's tag.

If the left side of
an item is
against metal
Pull the item out
before you start
scanning the shelf

Metal
Surface

2.5 in.
(6,35 cm)
minimum
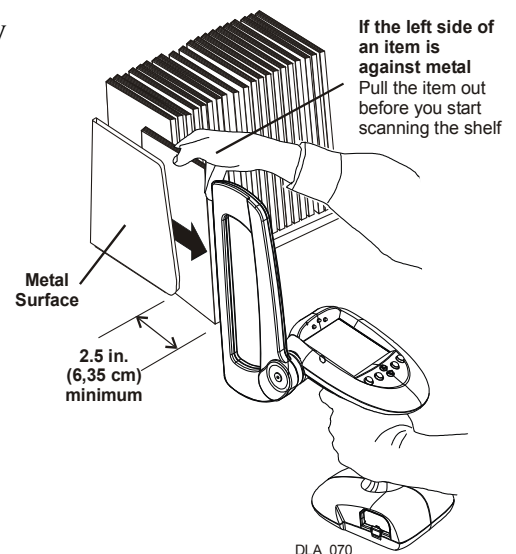
DLA_070

Maintaining the antenna at the correct distance

Hold the DLA antenna close to the book spine.

- Try to keep the antenna approximately 0.5 in. (1,3 cm) or less from the book spines.

- You may want to touch the antenna to each book to help ensure that each book's tag is read.

  🛈 If the pacing sound stops when checking shelf order, the DLA is no longer detecting a tag and the antenna may be too far away.

Position the antenna within 0.5 in. (1,3 cm) from the book's spine.

Antenna

DLA_010
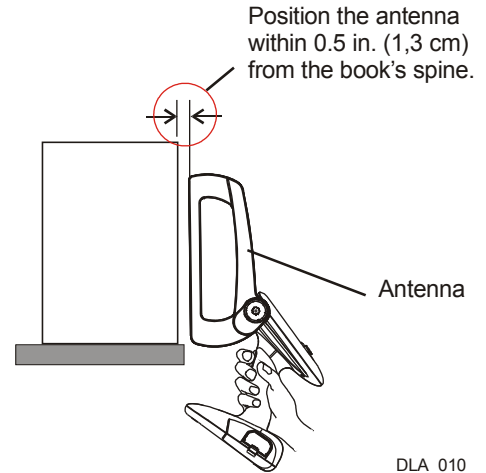
Moving the DLA at the correct speed

Move the DLA at the correct speed.

- The DLA creates a pacing sound (a continuous series of beeps) to help you move the DLA at the optimal speed.

- If you read at approximately one book per pacing sound, you are moving at the right speed.

  🛈 If necessary, you can read at a slower or slightly faster rate.

DLA_055
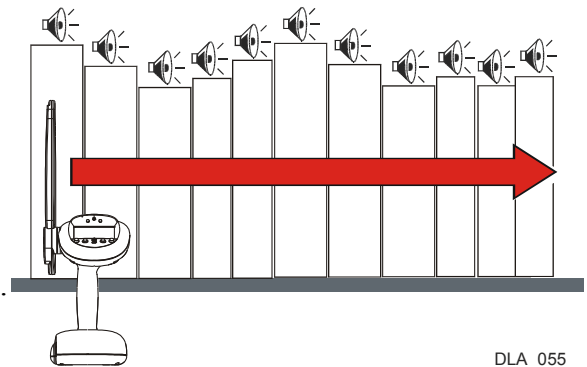
Reading groups of thin items

When reading a group of thin items using the normal method, you may encounter excessive shelf-order errors.

To reduce these errors, set the **Item Width** setting to Thin or use the reading technique shown in Method 2.

Method 1 – Set the Item Width setting to Thin

1. From the main DLA screen, press **Options**.

2. Set the Item Width setting (set in the Options: General screen) to Thin when checking the shelf order of large groups of thin items.

   This may reduce excessive false shelf-order errors.

3. Use the DLA to read the shelves.

   When you are through reading thin items, set the item width setting back to Medium.

3M

Digital Library Assistant

Setup Lists

Setup Options

User Mode Status

About DLA

| Lists | Options | Mode | About |

Options: General

Sound volume: Medium ▼
Item Width: Thin ▼
Language: Thin
Reader Timeout: Medium
☐ Items ordered rig Thick
☑ "Check Shelf" alerts
☑ Background inventory
☑ Verify: 🔓 🔒

| Set Clock | 6/14/05 4:29 pm |
| Prev | Next | | Home |

DLA_011
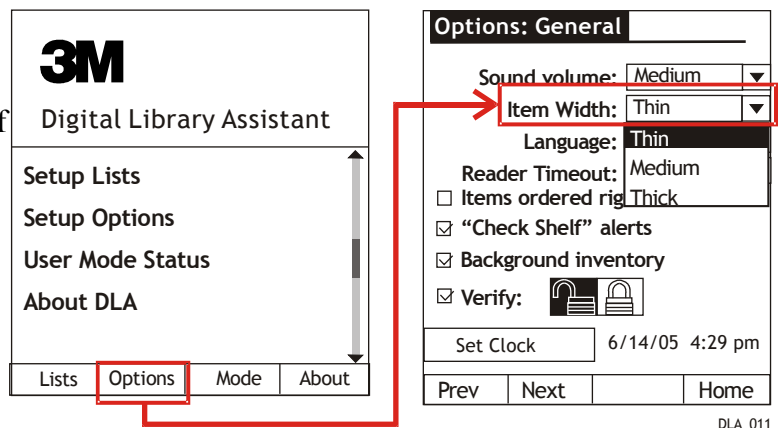
Method 2 – Move the items past the DLA

This method may only be necessary if you are reading very thin items.

1. Hold the DLA stationary (near the shelf).

2. Move each of the thinner items past the DLA antenna.

3. Continue down the shelf (moving the DLA as necessary).

DLA_056

i If the pacing sound stops, the DLA is no longer detecting a tag and the antenna may be too far away.
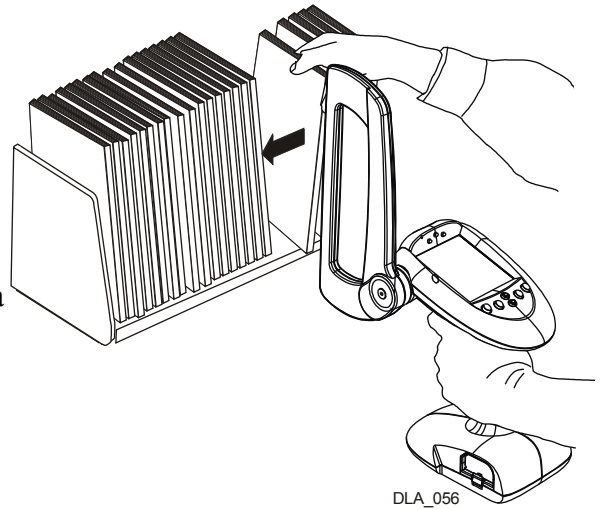
Practice exercise

The best way to train staff is to start with a shelf of at least 15 books and practice reading them until they can read them all consistently each time you scan the shelf.

See Shelf reading basics on page 36 for tips on shelf-reading techniques.

1. From the Home screen, press **Order**.
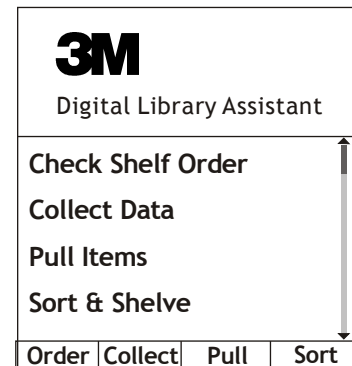
DLA_002

2. Create a 0.5-inch (1,3-cm) gap between the left side of a book and any metal surface (such as a metal shelf end or metal shelf divider).

   You can also pull the first book approximately 2.5 in. (6,4 cm) out from the metal divider.

3. Position the antenna just to the left of the first item on the shelf and press the trigger. Wait until you hear the pacing sound before you proceed.

4. Use the DLA to read all the books on the shelf.

   • Move the DLA at a speed of approximately one book per beep.

   • Make sure that the antenna is close to or touches each book.

   • Make sure that the DLA antenna is always parallel to the book spine.
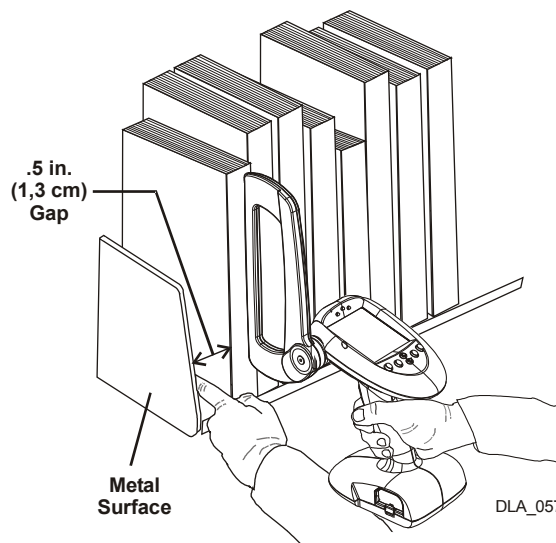
DLA_057

5. Release the trigger.

   • Look at the second number in the top-left corner of the display to see how many books that you read.
   For example, if the display shows 2/15, you read 15 books.

   • During this exercise, ignore the rest of the screen.

6. Press the **Clear** button and continue this exercise until you can consistently read all the books each time.
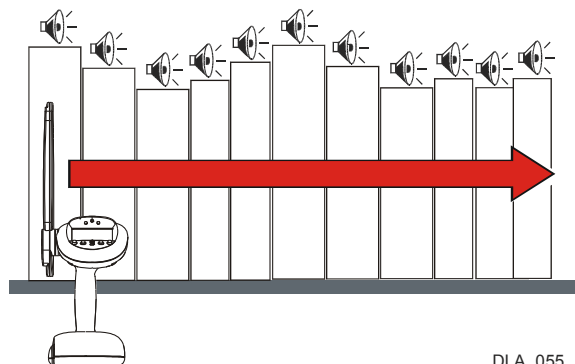
DLA_055

Managing the DLA work flow

Once you become familiar with the capabilities of the DLA, you should develop in-house policies and procedures that optimize work flow.

Each site should develop a custom work-flow-management plan for using the DLA. Your plan may include defining the following policies:

• Determine what types of information should be displayed on the DLA. This is defined using Data Manager software and can be customized for different DLA tasks.

• Create a schedule for how often you update the various lists (using Data Manager software)

• Determine task scheduling, inventory policies, etc.

• Make sure that your staff knows where they will get a memory card before using the DLA, and where they will take it after working with the DLA.

Best practices

Shelf order lists

If possible, export all of your shelf-order and search lists onto a single memory card.

• This ensures that the DLA can provide "shelf location" information when using various functions.

• This also helps prevent "not in database" messages.

Updating lists

Because your search requirements are constantly changing, you should develop a policy that specifies how often you update the search lists on your memory card(s).

You may want to update Search Lists on a regular basis.

You should periodically update your Order Lists as you add new items to your collection.

DLA_007
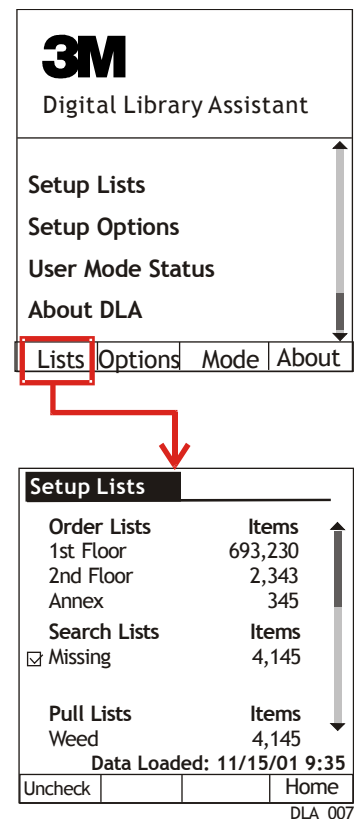
Customizing the DLA item display information

The information displayed on the DLA is determined by the export format that you assigned to the list in Data Manager software.

When the DLA reads an item, it can display two lines of information that help you identify the item. This information includes a **Primary Information** line and a **Secondary Information** line for each item.

Primary Info Field (top line)
Primary information is displayed in a large, bold font. The DLA can display approximately 25 characters of primary information.

Secondary Info Field (bottom line)
Secondary information is displayed in a smaller font. The DLA can display approximately 29 characters of secondary information.

i Both display fields use proportionally spaced fonts, so the actual number of characters may vary.

Missing information

If portions of the item information displayed on the DLA are missing, you may have problems with your circulation data or Data Manager software export formats.

Check the Data Manager export log to see if there are export warnings such as "missing primary information." (See Data Manager documentation for details.)

Occasionally, a corrupted memory card can result in missing display information.
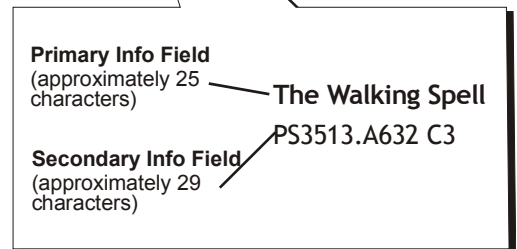
"Item not in database" message

This message appears if the DLA reads an item that is not on any of the lists that are currently on the DLA's memory card. The DLA can read the Item ID but the memory card does not contain any other information to help identify the item.
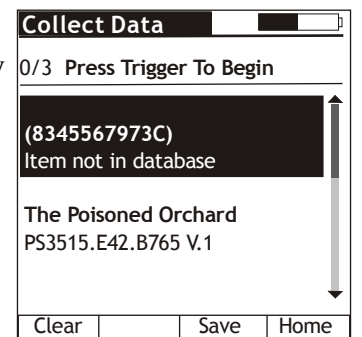
Typical DLA display information

The export formats that you create using Data Manager software determine the information displayed on the DLA.

• The examples in the table below show what a typical library might do.

• Feel free to experiment with Data Manager software to customize the types of information that appear on your DLA.

List Type	Primary Information (approximately 25 characters)	Secondary Information (approximately 29 characters)
Shelf order lists When using the Check Shelf Order function, the information displayed on the DLA is defined in Data Manager export format assigned to the shelf-order list that contains the item.	The title of the item is often selected as the Primary Information field.	The item's call number is often included in the Secondary Information field. Portions of the author's name are sometimes included.
Pull lists When using the Pull Items function, the DLA displays the primary and secondary information defined in the export format assigned to the pull list.	Weeding application The primary information often includes portions of the title and call number. Hold-list application The title of the item is often selected as the Primary Information field.	Weeding application The secondary information may include: publication date, last circulated date, total circ count, internal circ count, external circ count, etc. Hold-list application The call number of the item is often selected as the Secondary Information field. Other information such as branch designators can be included as secondary information.
Search lists Typically, when the DLA reads a search item, the information displayed is from the shelf-order list that contains the item. If the item is NOT on a shelf-order list, the information displayed depends upon the Data Manager export format assigned to the first search list that contains the item.	If a search item is found while using another DLA function, the primary and secondary information displayed depends upon which list(s) that item is on: • If the item is on a shelf-order list, the information displayed depends upon the Data Manager export format assigned to the shelf-order list. • If the item is NOT on a shelf-order list, the information displayed depends upon the Data Manager export format assigned to the first search list that contains the item. The DLA searches these lists in the order that they appear in the Data Manager main window. Search Labels If the item is on multiple search lists, the DLA searches the search lists in the order that they appear in the main Data Manager window. The DLA displays the search label from the first "active" search list that contains the item. It is important to use Data Manager to prioritize your search lists (place them in order with the most important search list at the top). For example, if you had the same item on a "claims returned" list and a "missing" list you might decide that finding a claims return item is more important than a missing item.	

Typical DLA work flow

1. Generate lists from circulation system.

   Generate reports (lists) from your circulation system to create the lists used by the DLA.

   - Shelf Order Lists – lists of items in shelf order (the order in which they should appear on the shelf).

   - Search Lists – lists of items the library would like to find (the order does not matter).

   - Pull Lists – lists of items that you will use the DLA to find (using the Pull Items function).

   - Collection Categories – user-defined categories where you can save Item IDs that the DLA read while using the Collect Items function.

   - Location Lists – If your circulation system uses a location-based shelving system, your system must generate Location Lists that identify specific locations in the library.

2. Use Data Manager software to export lists onto a memory card.

   Data Manager software processes lists extracted from the circulation system and exports them onto a memory card.

3. Step 3—Insert memory card into the DLA.

   Remove the memory card from the Data Manager memory-card drive and insert it into the DLA.

4. Step 4 – Check the date and time on the DLA.

   If the date/time displayed on the DLA Home screen is incorrect, tap the date/time display with the stylus to adjust the Set Clock window. Important: The Collect Data, Background Inventory and Inventory Location functions rely on accurate date/time to function properly.

5. Step 5—Use the DLA to perform tasks.

   The DLA uses the lists and collection categories on the memory card to perform the following tasks:

   - Check Shelf Order

   - Collect Data

   - Pull Items

   - Sort & Shelve

   - Find Items
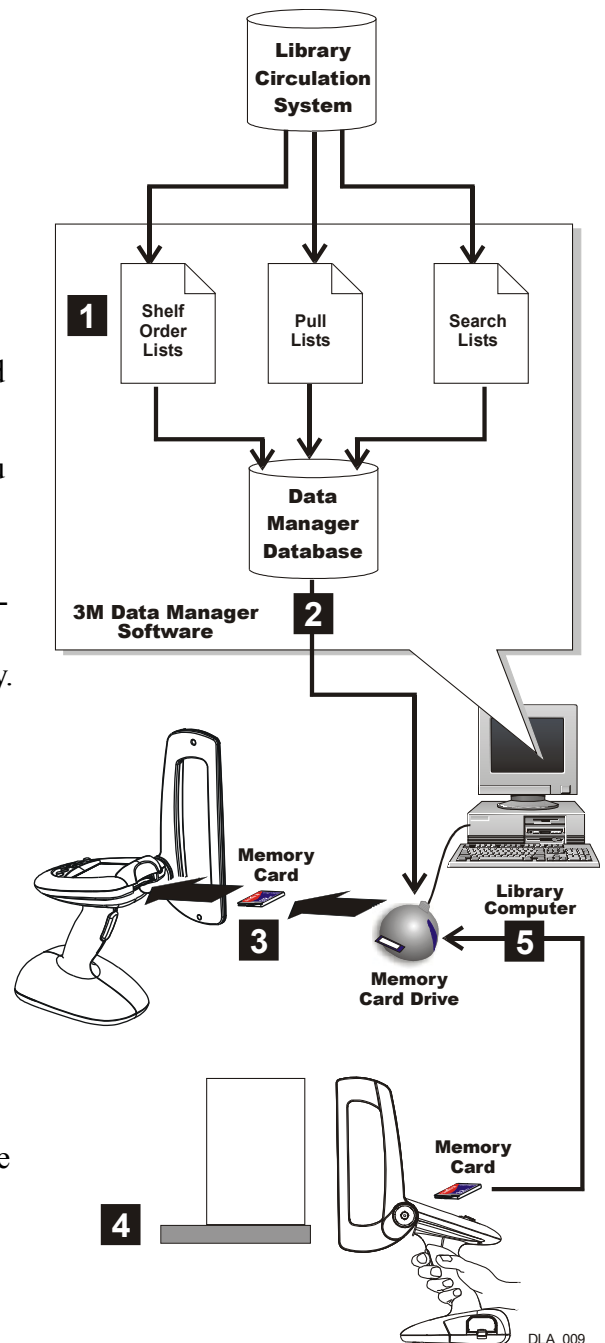
- Search for Items

- Shelve Items

- Change Security

- Show Item Info

- If Location tags are used:

  ◆ Check Location

  ◆ Check Location + Order

  ◆ Inventory Location

6. Use Data Manager to import collected data and pull results.

   Remove the memory card from the DLA and insert it into the memory-card drive. When Data Manager software imports the collected data and pull results, it creates text files that you can use to update your circulation system.

Performing tasks

Successful operation of the DLA depends upon proper shelf-reading techniques, accurate circulation system data lists, and proper Data Manager software setup.

Important notes:

- Be careful not to damage the Handheld.

- DO NOT drop the Handheld.

- DO NOT leave the Handheld in locations where it might fall.

- DO NOT leave the Handheld in direct sunlight.

- DO NOT expose the Handheld to heat.

- Only use the point of the stylus to touch the various buttons and checkboxes on the screen.

- Never use a pen, pencil, or other sharp object on the display screen.

- Save all the original Handheld packing materials.
  You will need the packing materials if you return the Handheld for repair.

- Do not over tighten the antenna adjustment screw.
  Over tightening the antenna adjustment screw may damage the Handheld.

- Always use the Change Battery function when you change the battery.
  If you do not use the Change Battery function when changing the battery, you may lose collected data and/or corrupt the memory card. Also, you may have to reset the Handheld.

- Always return to the Home screen before removing the memory card.
  This helps avoid corrupting data that you collected with the Handheld and saved to the memory card.

Preparing the DLA for user

Checking the battery charge

Before using the DLA, check the battery charge indicator (located in the upper right hand corner of each task screen).

If the battery gauge shows less than 50% charge remaining, replace the battery with a fully charged battery, and place the other battery in the charger. (See the 3M™ Handheld RFID Reader Owners Manual for battery charging and replacement procedures.)

During use, the DLA warns the user if the battery level is too low. To avoid possible loss of data, change the battery if the DLA displays a "low battery" message.

Battery Gauge

?	Indicates that the battery gauge will display shortly.
	100% charge remaining
	50% charge remaining
	25% charge remaining

0/0 Press Trigger To Begin

Home

702_005
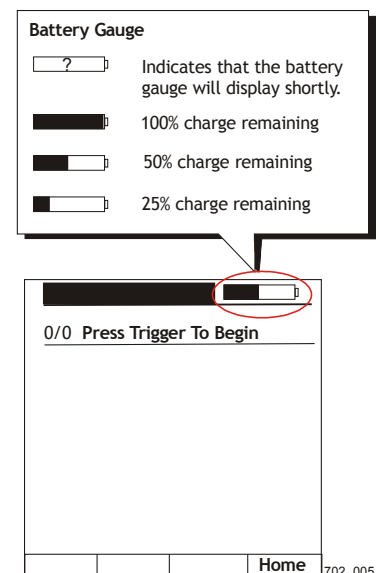
Checking lists

Before using the DLA, make sure that the correct lists and collection categories are on the memory card.

1. From the Home screen, press Lists.

2. Check the Data Loaded date to help determine if the lists on the memory card are current.

3. Make sure that the shelf-order lists appear in the order that matches the physical layout of your library.

   Use Data Manager software to change the order of these lists.
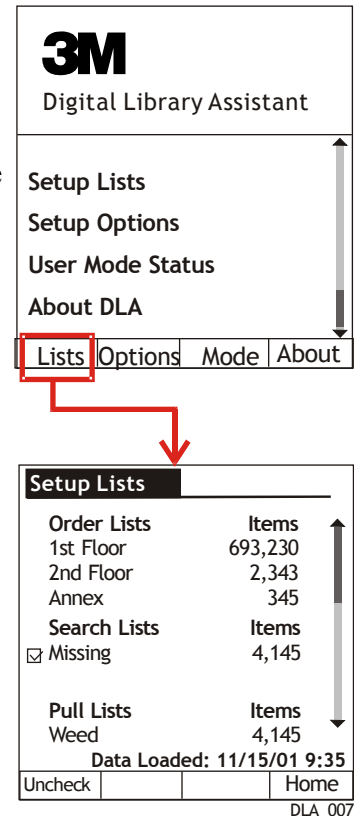
Battery management

Handheld Model 803/804

During storage, the DLA continues to use a small amount of battery power. Over time (approximately 2-3 days), the battery can lose its charge.

Battery-use recommendations

• Start each day with a fully charged battery.

• Whenever the DLA is not in use, remove the battery.

See the *3M™ Handheld RFID Reader Owners Manual* for instructions on charging the batteries.

Important notes:

Always use the Change Battery function when you remove the battery.
If you do not use the Change Battery function when removing the battery, you may lose collected data and/or corrupt the memory card.

Handheld Model 702 and Model 802

During storage, the DLA continues to use a small amount of battery power. Over time (approximately one week), the battery can lose its charge, requiring you to perform a reset.

See Using the Change Battery function on page 49.

Battery-use recommendations

•   Before use, check the battery gauge. If the battery gauge shows less than 50% charge remaining, replace the battery with a fully charged battery, and place the other battery in the charger.

•   Whenever the DLA will not be used for more that a week, use the Change Battery function to install a fully charged battery in the DLA.

See the *3M™ Handheld RFID Reader Owners Manual* for instructions on charging the batteries.

Common DLA tasks

Selecting DLA functions

The DLA display provides a simple menu structure that allows you to select various DLA functions.

To select a DLA function

Press the menu button that corresponds to the desired function.

•   For example, press the menu button under the word Order to select the Check Shelf Order function.

•   If necessary, use the scroll buttons to display the desired function.

Stylus

Menu Selections

Menu Buttons (4)

Scroll Buttons (2)

Use the **Menu Buttons** to select the menu selections that appear on the bottom of the display screen.

Use the **Scroll Buttons** to move up and down through the menu selections.

DLA_013
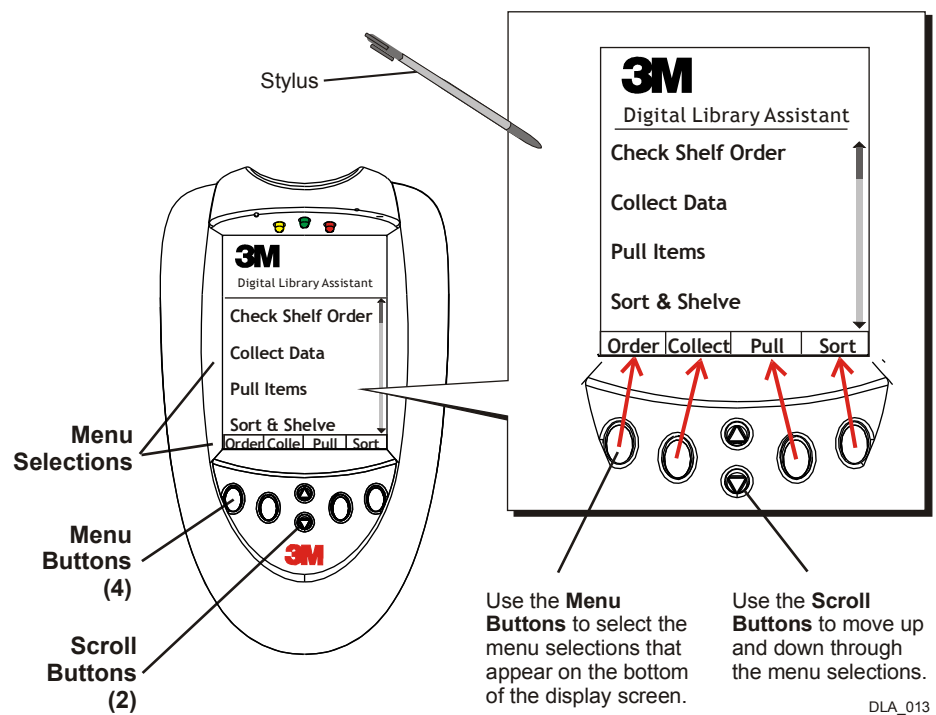
Using the Change Battery function

Always use the Change Battery function when you remove the battery.

ℹ️ If you do not use the Change Battery function when removing the battery, you may lose collected data and/or corrupt the memory card.

1. From the Home screen, scroll down until **Change Battery** appears.

2. Press **Battery** or use the stylus to tap **Change Battery**.

   The Model 803/804 also has a **Change Battery** function in the **Options** menu. To display the **Options** menu, use the stylus to tap in the upper left corner of the screen.

```
Options
Sound volume:
   Off
   Low                        Assistant
   Medium Low
   Medium
   Medium High
   High
About DLA
Change Battery
─────────────────────────
Change Battery
─────────────────────────
Find | Search | Shelve | Battery
```
Model 803
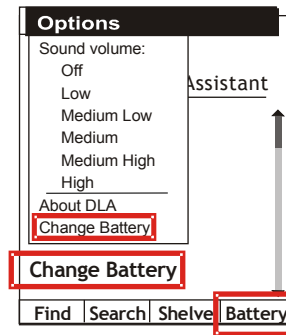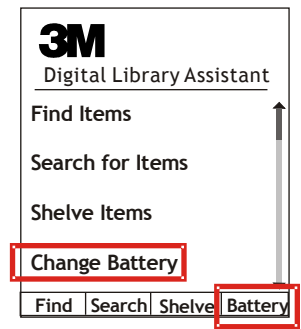
```
3M
Digital Library Assistant

Find Items

Search for Items

Shelve Items

─────────────────────────
Change Battery
─────────────────────────
Find | Search | Shelve | Battery
```
Model 702 and Model 802

DLA_090

3. When the screen goes dark, it is safe to remove the battery and replace it with a fully charged battery.

Using display lists

Performing some DLA tasks (Check Shelf Order, Collect Data, etc.) results in a display list that includes a number of items. The display list shows the items that were just read.

To remove a single item from the display list

1. Use the scroll buttons to select (highlight) an item.

   A black background with white text indicates that an item or error is selected.

2. Press **Clear** to remove the item from the list.

To remove all items from the display list

Press and hold **Clear** for approximately two seconds.

```
Check Shelf Order   ▮▮▯
─────────────────────────
6/24  Ready to Find Items
─────────────────────────
 1        ↓
Someday Soon
PS3513.A413 S5 1941

 2              Lost
The Walking Spell
PS3513.A632 C3
─────────────────────────
Clear | Shelve | Save | Home
```

Selected (highlighted) Item

Primary Info Field

Secondary Info Field
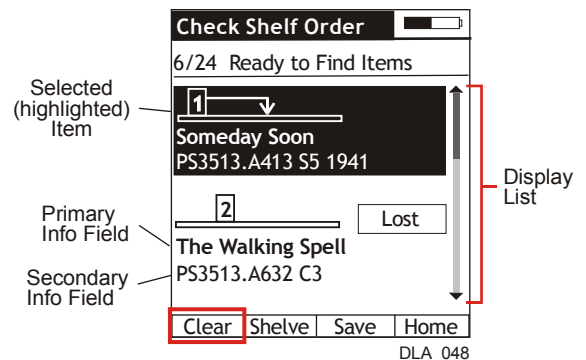
Display List

DLA_048

Saving Item IDs to the memory card

The DLA allows you to save the current list of Item IDs (the Item IDs of the items currently displayed on the DLA) into a user-defined collection category.

To save Item IDs to a collection category

1. Press **Save** to display the Save Data screen.

2. Select the collection category where you want to save the display list.

3. Press **Save** to save the display list and return to the previous screen.

   • The DLA saves the Item IDs of all the items in the display list to the collection category that you selected.

   • All collected data that you save is written to the memory card.

4. At this point, you can either clear the items from the screen or save the Item IDs in a different category.

Sort & Shelve	
3/14 Ready to Find Items	
1	
The Spirit of St. Louis	
629.13 Lindber	
2 Weed	
Under a Wing	
629.13 Lindber	
Clear	Shelve	Save	Home

Check Shelf Order	
6/24 Ready to Find Items	
1	
Someday Soon	
PS3513.A413 S5 1941	
2 Lost	
The Walking Spell	
PS3513.A632 C3	
Clear	Shelve	Save	Home

Collect Data	
7/34 Press Trigger To Begin	
Queen Lear	Lost
PS3515.E42.A698 V.1	
The Poisoned Orchard	
PS3515.E42.B765 V.1	
Clear		Save	Home

Save Data	
Select Category	
lost	48
Weed	132
Default	25
Clear		Save	Back

DLA_018

Using the DLA trigger lock

The DLA trigger-lock feature allows you to place the DLA in a continuous read mode without having to keep the trigger pressed.

To turn the DLA trigger lock on

1. Press and release the trigger within 1/2 second.

   • The DLA's reader stays ON allowing you to read items without pressing the trigger.

   • The "scanning in progress" or "scanning" message at the top of the screen will flash to indicate that the trigger-lock function is active.

2. You can now use the DLA to read items.

   The DLA will stay in trigger-lock mode as long as it continues to read new items.

3. When you are finished reading items, use one of the methods below to deactivate the DLA trigger lock.

   The "scanning in progress" or "scanning" message at the top of the screen will stop flashing when you turn the trigger-lock OFF.
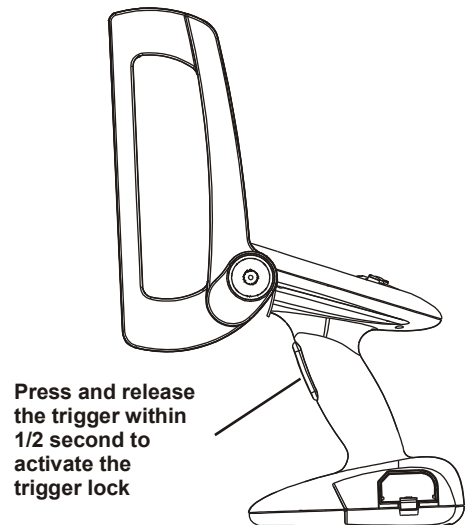
To turn the DLA trigger lock OFF

Method 1—Press the trigger to stop the DLA reader.

Method 2—Press any one of the menu buttons. This will turn off the trigger lock and execute the button's function.

Note: The DLA automatically turns the trigger lock OFF if the DLA does not read a new tag within 10 seconds.

If necessary, change the 10-second reader timeout value in the Options: General setup screen.

See Changing the Reader Timeout setting on page 21.

Press and release the trigger within 1/2 second to activate the trigger lock

```
Collect Data              ▮
0/0        Scan in Progress

                                  Home
```

The "Scan in Progress" message flashes when the trigger lock is active.
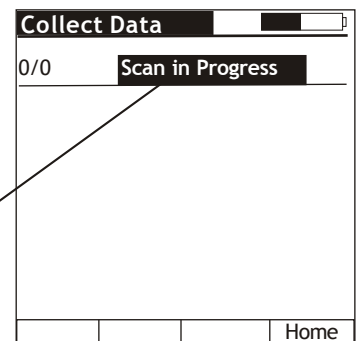
DLA_062

Using the Background Inventory function

Your library should have a policy on how and when to use the background inventory function.

If the background inventory function is ON, the DLA saves the Item ID of each tag read while using other DLA functions (such as Check Shelf Order).

- In most cases, the DLA will not save duplicate Item IDs to the Background Inventory category. When you import this inventory data, Data Manager software removes any duplicate Item IDs.

- See Enabling Backgound inventory on page 22 for setup information.

- The Background inventory checkbox only appears if you selected User choice in the Admin Settings screen.

Using background inventory data

The DLA saves the background inventory data onto the memory card. To create a background inventory text file:

- Remove the memory card and insert it into the memory-card drive used by Data Manager software.

- Use Data Manager software to import background inventory data and any pull results or collected data.

- Data Manager software creates a text file that contains the Item IDs that the DLA saved to the Background inventory category.

Note: The background inventory function does not collect location information, if used.

Using the screen light option (Handheld Model 702 and Model 802 only)

The DLA includes a back-lighted screen option.

Note: If you use the DLA screen light, you may have to recharge the battery more often.

To turn the screen light on or off

Touch the stylus to the upper right corner of the screen.

The screen light will turn off automatically when the DLA goes into sleep mode. The DLA enters sleep mode (blanking the screen) after approximately two minutes of non-use.
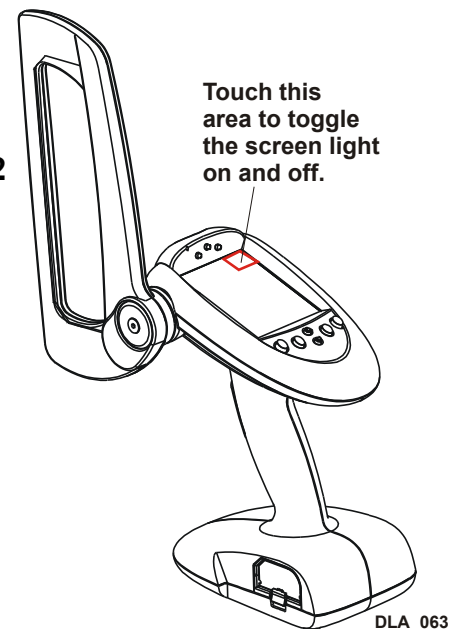
Using the Verify option

To use the Verify option, you must first enable the option and then define the type of security status that you want the DLA to identify (secured item or unsecured item).

See Enabling the Verify option on page 23.

With the Verify option enabled, the DLA can identify the security status of items while performing other DLA functions (such as Check Shelf Order). This option can be configured to detect either unsecured items or secured items (not both).

i The Verify option is only available at sites that use RFID Security.

Identifying security status

1. From the main DLA screen, select a function (for example Collect Data) that you want to perform.

2. Use the DLA to perform the function.

    • The DLA emits a series of beeps each time it reads an item that meets the verify criteria (secured or unsecured) that you defined in the Options screen.

    • In addition, the DLA displays a verify icon next to the item. The icon displayed depends on if the option is configured to detect secured or unsecured items.
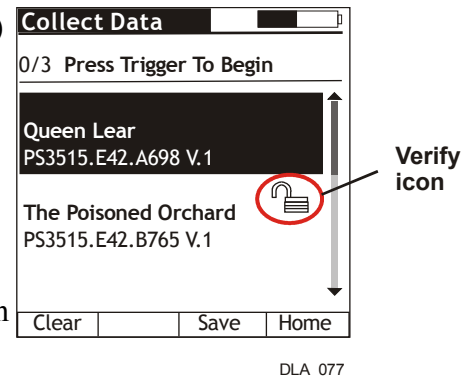
i If an item meets the verify criteria and it is also on an active search list, the search list name appears in place of the verify icon.

Quick access to Volume, Change Battery, About DLA (Model 803/804 only)

While using the DLA, you can quickly access some key functions by selecting the **Options** menu.

1. Use the stylus to tap the upper left area of the DLA screen.

    The **Options** menu appears.

2. Select a new volume level, change the battery, or display DLA software information such as version number and tag data formats.
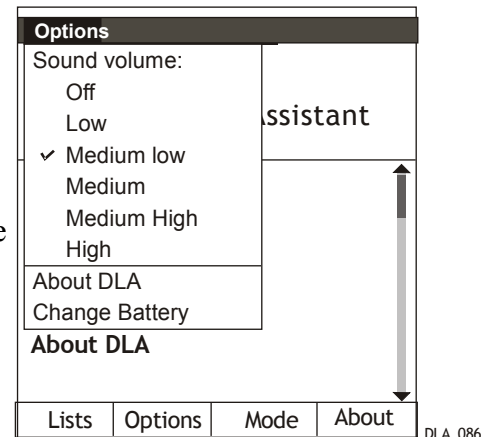
Task quick reference guides

Checking Shelf Order/Reshelving	Reshelving	Collecting Data

3M
Digital Library Assistant

Check Shelf Order
Collect Data
Pull Items
Sort & Shelve

Order | Collect | Pull | Sort

3M
Digital Library Assistant

Find Items
Search for Items
Shelve Items
Change Battery

Find | Search | Shelve | Battery

3M
Digital Library Assistant

Check Shelf Order
Collect Data
Pull Items
Sort & Shelve

Order | Collect | Pull | Sort

Check Shelf Order

0/0   Press Trigger To Begin

Home

Shelve Items

+0   Press Trigger To Begin

Read a single item to shelve

Goes Between:

Home

Collect Data

0/0 Press Trigger To Begin

Home

Check Shelf Order

6/24 Ready to Find Items

1

Someday Soon
PS3513.A413 S5 1941

2

The Walking Spell
PS3513.A632 C3

Clear | Shelve | Save | Home

Optional

Shelve Items

+0   Press Trigger To Begin

Someday Soon
PS3513.A413 S5 1941

Goes Between:

Clear | Home

Collect Data

7/34 Press Trigger To Begin

Queen Lear   Lost
PS3515.E42.A698 V.1

The Poisoned Orchard
PS3515.E42.B765 V.1

Clear | Save | Home
DLA_024

Shelving

-8 Press Trigger to Begin

1

Someday Soon
PS3513.A413 S5 1941

Goes Between:
The Fire Eaters
PS3513.A413 B6 1974
The Poisoned Orchard
PS3513.A632 B5

Clear | Cancel | Home
DLA_046

Shelve Items

+2   Press Trigger To Begin

Someday Soon
PS3513.A413 S5 1941

Goes Between:
The Fire Eaters
PS3513.A413 B6 1974
The Poisoned Orchard
PS3513.A632 B5

Clear | Home
DLA_047

Save Data

Select Category

In-house   48
Weeded   132
Default   25

Clear | Save | Back

DLA_049
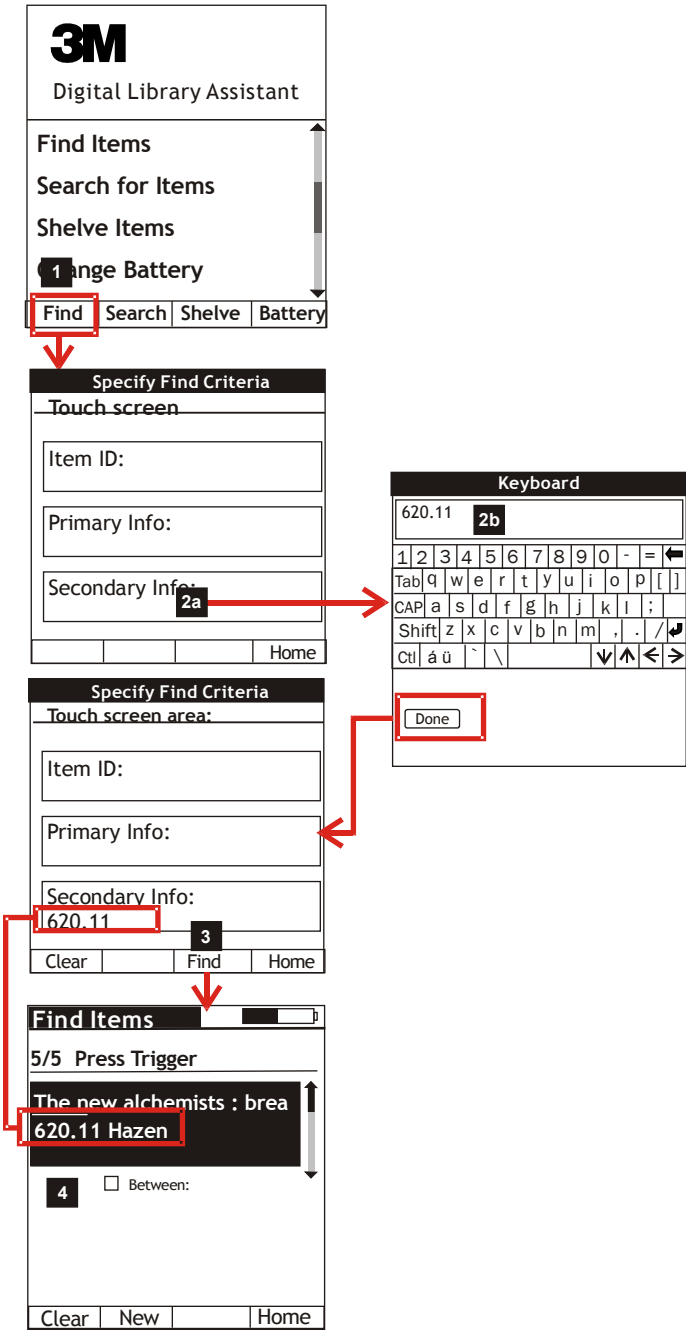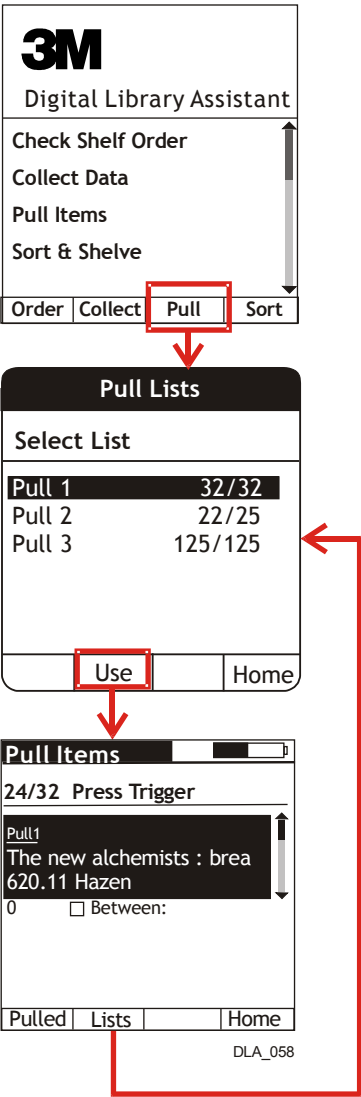
Sort and Shelve   ## Search Function

3M
Digital Library Assistant
Check Shelf Order
Collect Data
Pull Items
Sort & Shelve
| Order | Collect | Pull | Sort |

3M
Digital Library Assistant
Find Items
Search for Items
Shelve Items
Change Battery
| Find | Search | Shelve | Battery |

Sort & Shelve
0/0 Press Trigger To Begin

| | | Home |

Search for Items
1/24 Press Trigger To Begin

Queen Lear   Lost
PS3515.E42.A698 V.1

| | | Home |

DLA_060

Sort & Shelve
3/14 Ready to Find Items

1
The Spirit of St. Louis
629.13 Lindber

2   Weed
Under a Wing
629.13 Lindber

| Clear | Shelve | Save | Home |

Using the Check Shelf Order function

Use the Check Shelf Order function to read a shelf and find items that are in the wrong shelf position.

While performing check shelf order, any items that you read that are on an active search list appear with the search-list name next to it (enclosed in a box).

Before you begin…

The memory card that you insert into the DLA should contain current versions of the various lists and collection categories required to perform tasks:

- A shelf-order list for the items that you will be checking. The shelf-order lists should appear in the order that they are physically located in the library.

- Any search list that contains items that you want to search for while checking shelf order.

- Any data collection categories required for data-collection tasks.

DLA staff options that affect the Check Shelf Order function
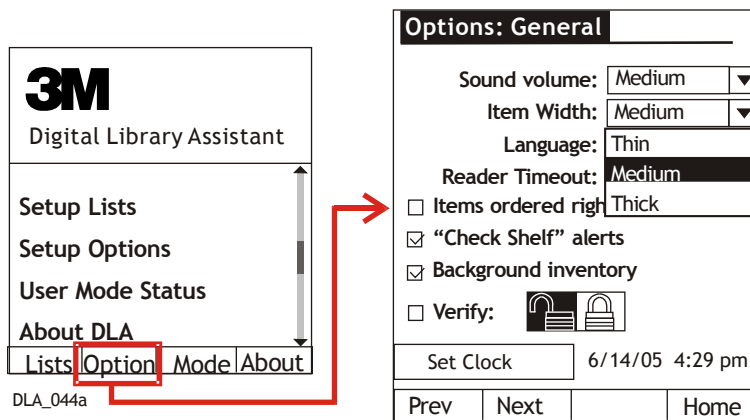
Item Width

3M recommends using the medium setting for most applications. An incorrect setting may result in excessive shelf-order errors or reduced accuracy. (See Changing the item width setting on page 20.)

Checkshelf Alerts

This setting is typically enabled to alert you to items that may belong on a different shelf. (See Enabling Check Shelf alerts on page 22.)
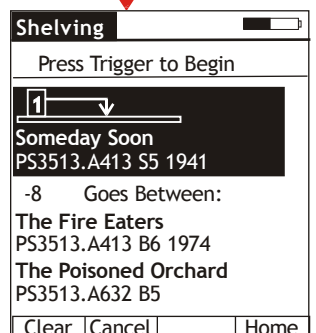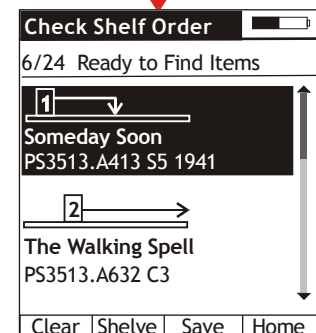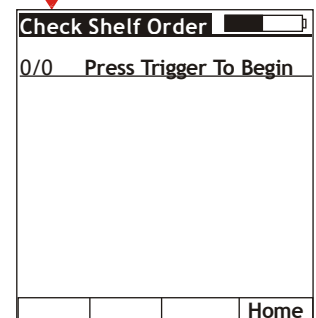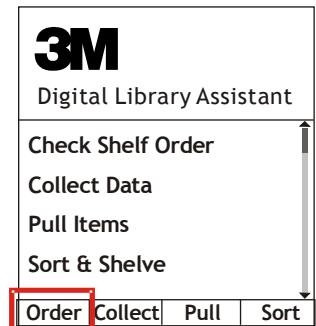
Background Inventory

Enable this option if you want to automatically collect and save the Item ID of each item that you read while you are checking shelf order.
(See Enabling Backgound inventory on page 22.)

Shelf Order display graphics

After reading a shelf, the DLA lists any shelf-order errors and search results in the order that they were found.

- The shelf-order graphics help you identify the items and their location.

- All shelf errors are numbered in the order that they were found.
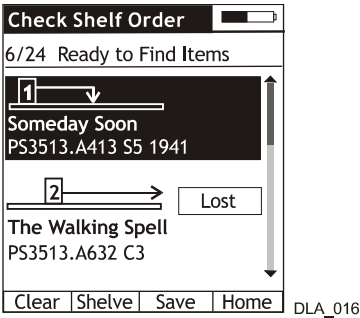
Shelf errors

Shelf Error/Items Read Counter

This counter displays the number of errors / the total number of items read. (In this example, the DLA read 24 items and 6 errors were detected.)

Search Item

Search-list names appear each time the DLA reads an item that appears on an active search list.
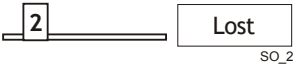
Checkshelf Alert

Checkshelf alert messages appear if the DLA reads an item near the beginning or end of a shelf that may belong on a different shelf (see Checkshelf Alerts on page 57).
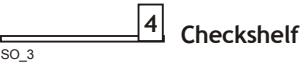
Item Not in Database

The Item ID for this item is not on any of the shelf-order and search lists on the memory card. The shelf-location graphic shows the item's approximate location.
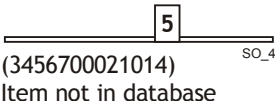
Blank Tag

A "blank tag" message appears when the DLA reads a blank tag that was not correctly programmed during the tagging process.
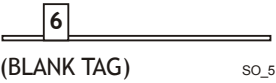
Shelf Order information

On-Shelf Graphic

Each shelf error includes a shelf graphic that shows the item's approximate position (where the item was read in relation to the number of items read).

Current shelf location

The arrow points to the
correct shelf location.   SO_6
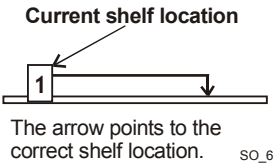
Off-Shelf Graphic

If the shelving arrow points off the shelf, the item belongs on a different shelf.

If the Checkshelf alert setting is not enabled, the arrow will point at the end of the shelf instead of off the shelf:

SO_8

Current shelf location

SO_7

If the arrow points to the right,
the item belongs <u>after </u>this shelf.

If the arrow points to the left,
the item belongs <u>before </u>this shelf.
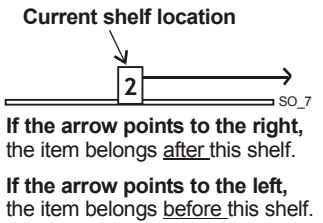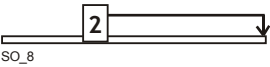
Item Data

Each shelf error includes the primary and secondary information fields that you defined in Data Manager.

SO_9

Primary→Someday Soon
Secondary→PS3513.A413 S5 1941

Item Verify Icon

If the verify option is enabled, the DLA displays a verify icon for each item that meets the verify criteria. If the item is on an active search list, the verify icon is not shown. The Verify feature is only available at sites that use RFID Security.

SO_10
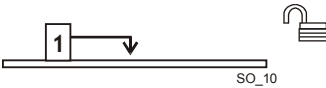
Step 1—Use the DLA to read all the items on the shelf

1. From the Home screen, press Order.

2. Adjust the antenna position parallel to the book spine.

3. If the first book is against a metal shelf divider:

   • Pull the book out approximately 2.5 in. (6,35 cm)

   - or -

   • Place your finger between the left side of the book and the metal shelf divider to create a 0.5-inch (1.3-cm) gap.

4. Use the DLA to read the shelf.
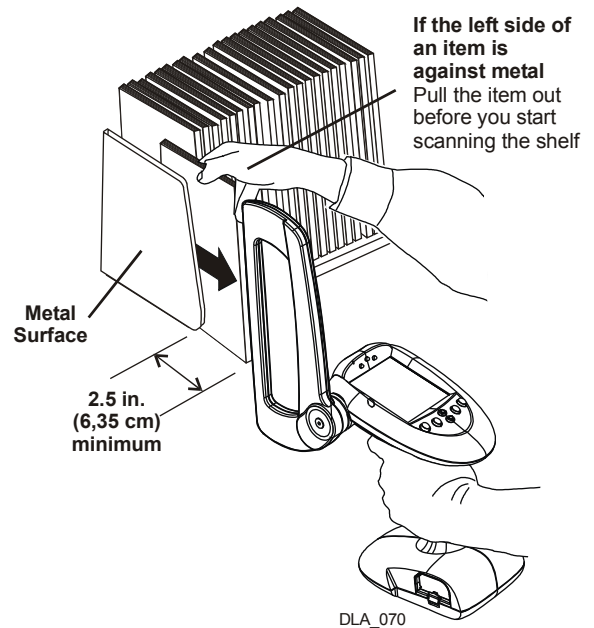
   a) Press and hold the trigger (or use the trigger lock function).

   b) Touch the antenna to the first item on the left side of the shelf.

   • Hold the antenna parallel to the book spine.

   • The bottom of the antenna should line up with the bottom of the book spine.

   c) When the pacing sound starts, continue to press the trigger and move the antenna across the shelf.

   • You can hold the antenna up to 0.5 in. (1,3 cm) from the book spine but it is often best to lightly touch the antenna to each book.

   • Move the DLA at a rate of approximately one book per pacing sound.

   • The pacing sound stops if the DLA is not reading tags.

   ℹ️ The pacing sound is only a reference. You can move the DLA at a slightly slower or faster speed.

5. When you reach the end of the shelf, release the trigger and check the DLA screen for errors:

   • If no errors are found, use the DLA to read the next shelf.

   • If shelf-order errors are found, see Step 2—Correct any shelf order errors on page 61 for instructions on how to find, correct, and clear errors.

If the left side of an item is against metal Pull the item out before you start scanning the shelf

Metal Surface

2.5 in. (6,35 cm) minimum

DLA_070

The antenna should be within 0.5 in. (1,3 cm) of the book's spine.

The bottom of the antenna should line up with the bottom of the book.

DLA_065
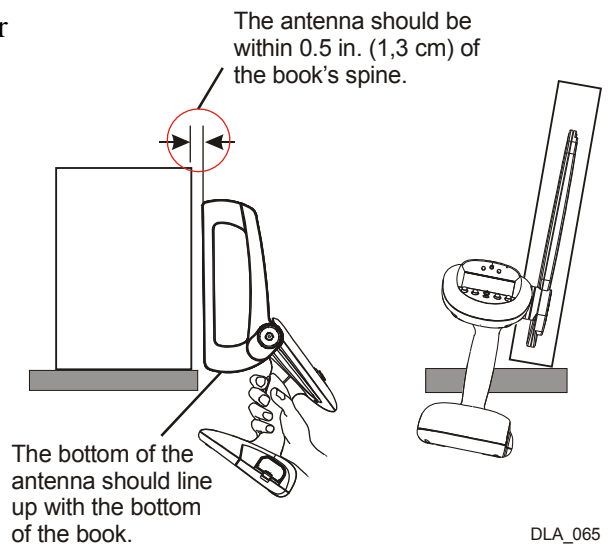
Step 2—Correct any shelf order errors

1. Locate and remove the selected (highlighted) item from the shelf.

   a) Press the trigger and read the shelf with the DLA to find the misshelved item.

   • The shelf graphics show the item's approximate location.

   • The DLA emits rapid beeps and turns all three lights ON when it finds the item.

   b) Remove the item from the shelf.

2. Press Shelve and shelve the selected item.

   a) Use the DLA to find the correct shelf location.

   • The indicator lights, sounds, and distance indicator show when the DLA is to the left, right, or at the correct shelf position.

   • The distance indicator displays the approximate number of item positions between the current DLA location and the correct location.

   • You can also use the **Goes Between** listing and the shelf-location arrow to help find the correct shelf location.

   b) Place the item in correct shelf location.

3. Press **Clear** to remove the item from the list.

   a) The display will return to the shelf-order error listing.

   b) Repeat steps 1-3 to shelve the rest of the items.

   [i] If desired, press and hold **Clear** for approximately two seconds to clear all items from the error listing.

4. Optional – After shelving items, recheck the shelf order.

DLA is left of the correct location

DLA is at the correct location

DLA is right of the correct location
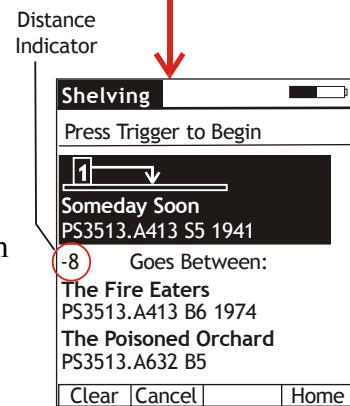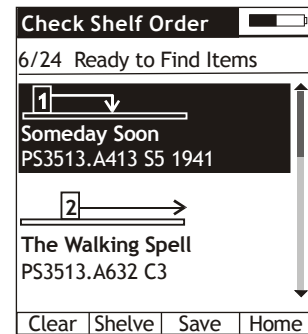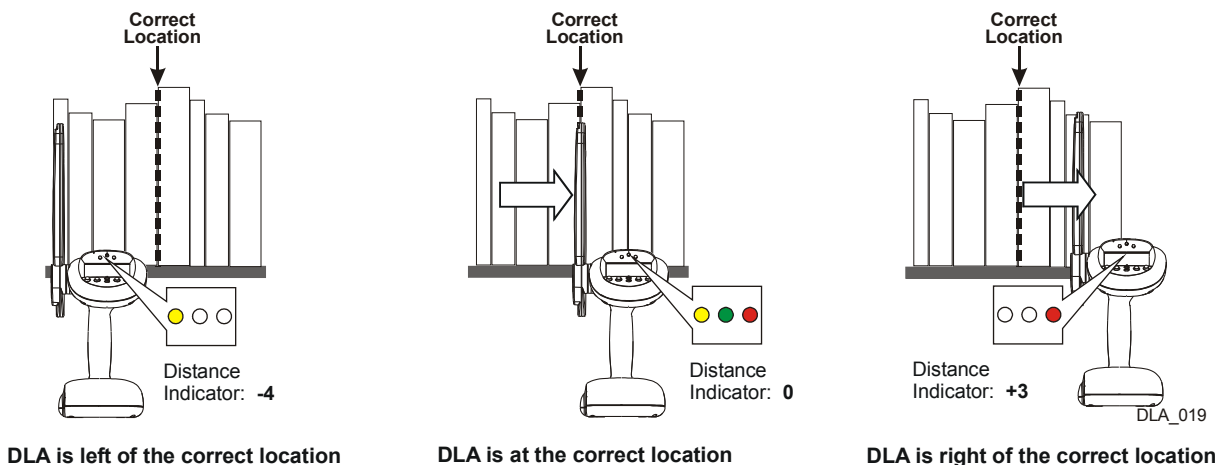
Checkshelf alerts

During the Check Shelf Order function, the DLA will display Checkshelf alert messages that can help you identify items that may belong on a different shelf (even though they are in the correct shelf order for the shelf that you just scanned).

"Checkshelf" items appear near the beginning or end of the shelf.

1. When you see a Checkshelf Alert, locate the item and check if it is correctly shelved.

   If the verify option is enabled, the DLA displays a verify icon for each item that meets the verify criteria. If the item meets the verify criteria and is a Check-shelf item, the verify icon is displayed and there will be no indication of a Check shelf alert.

    i The Verify feature is only available at sites that use RFID Security.

2. If the item is misshelved, remove it from the shelf for future re-shelving.

Excessive Checkshelf alerts

To avoid excessive alert messages, you can disable (uncheck) the "Checkshelf" alerts setting (Options screen) when checking the shelf order of shelving carts.

Check Shelf Order
6/24 Ready to Find Items
1 Checkshelf
Someday Soon
PS3513.A413 S5 1941
2 Lost
The Walking Spell
PS3513.A632 C3
Clear | Shelve | Save | Home

The Check shelf alert indicates that this item is in correct shelf order but may belong on a different shelf.

Misshelved Item
(Check shelf Alert)

Correct
Location

DLA_069

Using the Collect Data function

The Collect Data function allows you to save collected Item IDs to a memory card. Data Manager software can import collected Item IDs from a memory card and save them as formatted text files. You can use these text files to update the data in your circulation system (for example, in-house use).

Before you begin…

Use Data Manager software to create different collection category labels. Once created, export the collection categories (along with lists) to a memory card.

When you use the DLA to collect Item IDs from RFID tags you can save the Item IDs to the memory card in any of the collection categories that you exported onto the memory card.

i   You can save collected data to a specific category. This helps ensure that the imported text files do not contain "mixed use" Item IDs. For example, you would not want to save "in-house" and "weeded" items in the same category.

Collection display features

You can clear individual items from the display list before you save the data to the memory card. You can also clear the entire display list.

Display List Counter

Item is on an active search list

Collect Data
7/34 Press Trigger To Begin

Queen Lear
PS3515.E42.A698 V.1   Lost

The Poisoned Orchard
PS3515.E42.B765 V.1

Clear   Save   Home

Item Info

Display list counter

Displays the number of search items read / the total number of items in the display list.
In the example:

- The display list contains 34 items.

- Seven of these items are search items.

Item information

The DLA displays the primary and secondary lines for each item on the display list.

- This information only appears if the memory card contains a shelf-order or search list that includes the item.

- The information displayed in the primary and secondary lines is defined by the export format assigned to the list in Data Manager software.

Item is not on any list

Verify icon

Collect Data
0/3 Press Trigger To Begin

(8345567973C)
Item not in database

The Poisoned Orchard
PS3515.E42.B765 V.1

Clear   Home

DLA_027

Item is unsecured   Item is secured
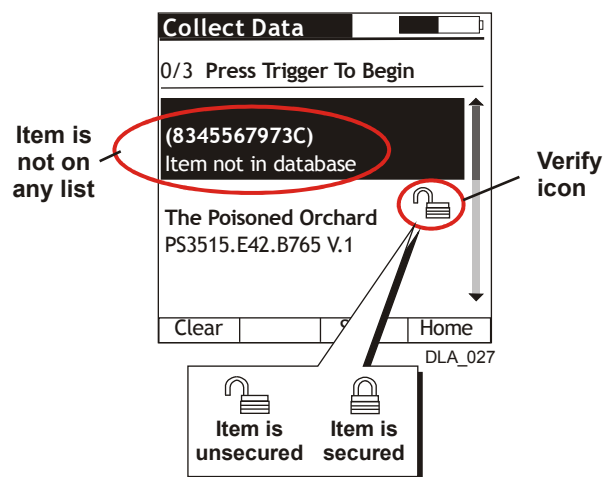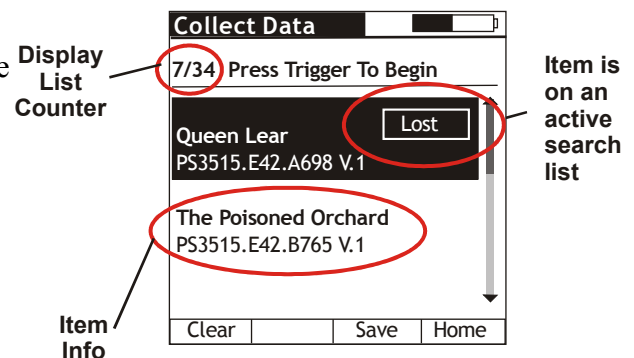
Not in database items

The DLA displays the Item ID with an "Item not in Database" message. No primary or secondary information is displayed.

This occurs if none of the lists on the memory card contains the item.

🛈 Not-in-database items can be collected, saved, and imported into Data Manager.

Search items

Items that are on a search list appear in the display list with a search-list label.

Verify icon

The DLA displays a verify icon when it reads any item that meets the verify criteria. This feature is only available if the Verify option is enabled. The type of verify icon displayed depends on if the option is configured to detect secured or unsecured items.

🛈 The Verify feature is only available at sites that use RFID Security.

Step 1—Use the Collect Data function to collect item IDs

1. Insert a memory card into the DLA.

   The memory card should contain the data collection-category labels that you exported from Data Manager.

   Note: If you want to display primary and secondary information on the DLA, the memory card should contain shelf-order lists or search lists that include the items that you will read.

   • The DLA will display the Item ID with an "Item not in Database" message if the item does not appear on a shelf-order or search list.

   • The DLA will collect and allow you to save the Item IDs of "not in database" items.

2. From the **Home** menu, press **Collect.**

   The Collect Data screen appears.

3. Use the Collect function to collect data.

   a) Press and hold the trigger (or use trigger lock) and begin reading items.

   As the DLA reads each item, the primary and secondary fields appear on the display list.

   b) Release the trigger to stop reading items.

4. You can repeat Step 3 to continue to add items to the display list.

   [i] You can add up to 255 Item IDs to the display list before saving them to a collection category.
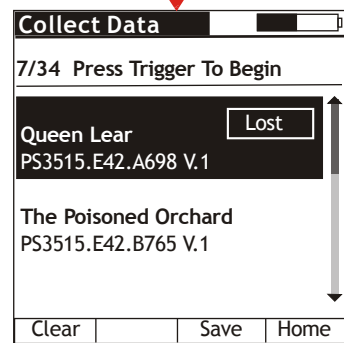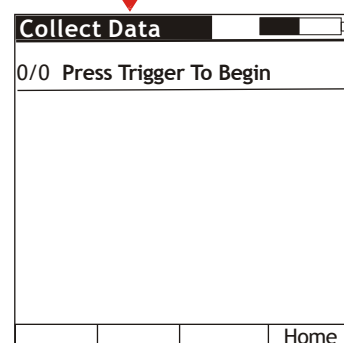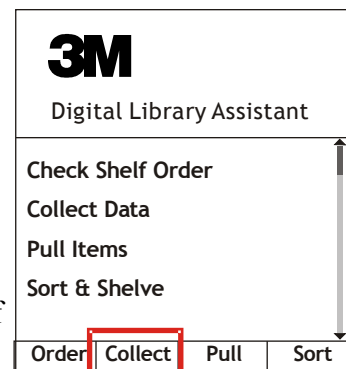
When the DLA reads an item for the first time

• A single beep plays and the green light illuminates.

• The item appears on the display list.

   ◆ Items that are on a shelf-order list appear in shelf order.

   ◆ Items that are not on a shelf-order list appear at the bottom of the display list.

• If the item is already on the display list and you read the item again:

   The green light illuminates and no sound is played.

When the DLA reads a search item for the first time

• The DLA plays a series of three rapid beeps and all three lights illuminate.

• In most cases, the DLA adds search items (that are also on a shelf-order list) to the display list in sort order.

Any search item that is not on a shelf-order list is added to the bottom of the display list.

If the item is already on the display list and you read the item again:

- The DLA plays a series of three rapid beeps and all three lights illuminate.

- The DLA displays the search item's information.

Step 2—Save the collected data to a collection category

As you collect Item IDs, you should periodically save them to one of the categories on the memory card.

1. From the Collect Data screen, press **Save.**

   The Save data screen appears.

2. Select the category where you want to store the collected Item IDs.

This screen displays the current number of collected Item IDs saved in each category.

3. From the Save Data screen, press **Save**.

   - The DLA saves all the Item IDs in the display list to the selected category on the memory card.

   - Press **Back** to return to the Collect Data screen without saving the Item IDs.

4. The Collect Data screen appears again.

   - Press **Save** again if you want to save the display list in another category.

   - You can also insert a different memory card and save the display list to it.

   - If desired, press and hold **Clear** to clear all the Item IDs from the display list.

5. Press and hold the DLA trigger (or use the trigger lock) to start collecting more data.
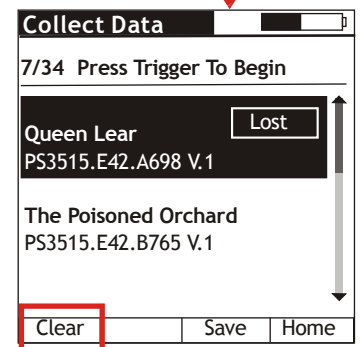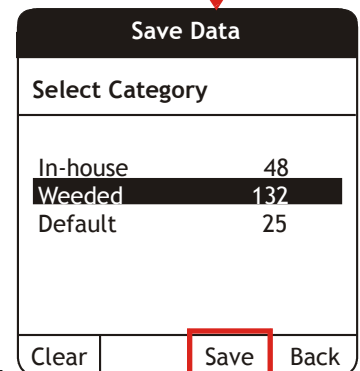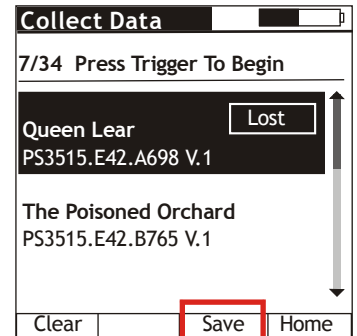
Duplicate data

In some instances, the DLA will save duplicate Item IDs in the same category.

When you use Data Manager software to import collected data from the DLA, Data Manager removes any duplicate Item IDs that you saved to a collection category.

Clearing the IDs from a collection category

This process removes all the Item IDs in the selected category from the memory card.

1. Display the Save Data screen.

   Display Save Data by pressing **Save** while in any DLA screen that has an active display list.

2. Use the scroll buttons to select the collection category that you want to clear.

Save Data	
Select Category	
In-house	48
Weeded	132
Default	25
Clear	Save Back

   DLA_022

3. Press **Clear**.

   A dialog box appears to allow you to clear Item IDs or cancel.

4. Press **OK** to clear the Item IDs from the selected category and return to the Save Data screen.

   Press **Cancel** to return to the Save Data screen without clearing the data.

Clear Category
Clear all items from:
Name:
Weeded
Items:
132
OK   Cancel

   DLA_033

Using the Pull Items function

Overview

To use the Pull Items function, you must use Data Manager software to export pull lists to a memory card. You can then select a pull list and use the DLA's Pull Items function to locate and pull items.
Applications may include:

* Finding hold items

* Finding items that you may want to weed

1. Use Data Manager software to create and export pull lists (see Digital Data Manager documentation).

    You create pull lists from your facility database and then export them to a memory card using Data Manager software.

2. Use the DLA to locate and pull items.

    * The items that you want to pull must be on a pull list that you exported to the current memory card.

    * Select a pull list to use.

    * As you pull items from the shelf, you can press Pulled to remove the item from the display and specify it as pulled.

    * Additionally, while using the Pull Items function, the DLA can find and help identify items that are on active search lists.

3. Use Data Manager software to import pull results
    (see Digital Data Manager documentation).

    * After you have pulled most of the items on a pull list, there may still be items on the list that you did not find.

    * You can use Data Manager software to import these "pulled" and "not pulled" lists as text files. You can print or use these text files to update the "request status" on your facility's item database or for other purposes.
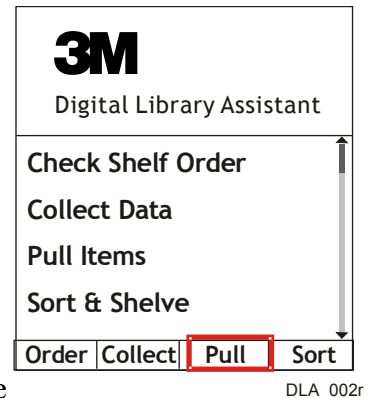
Each time you import pull results

Data Manager software creates two date-stamped text files for each export operation. The file name contains the date, number of items in the file, and an indicator (+ or -) that specifies if the items in the file were pulled or not pulled.

Using the DLA to locate and pull items

Step 1—Select a pull list

1. From the Home screen, press **Pull**.

   The Pull Lists screen displays all the pull lists on the memory card.

2. Select the pull list that contains the item(s) that you want to pull.

   The numbers above the pull-list name indicate: number of items that still need to be pulled/ total number of items in the original list. For example, 22/25 indicates that the original pull list had 25 items, three items were pulled and removed from the list, and 22 items have not been pulled yet.

3. Press **Use**, to select the currently highlighted pull list.

   The Pull Items screen displays the first item on the pull list.

   If necessary, use the scroll buttons to move down the list and select the item that you want to pull.

   The items in the pull list appear in the order that your circulation system placed them in when you created the list.

   🛈 Large pull lists (3000 items or more) may take up to 90 seconds to load.

4. Set the **Between** option ON (selected) or OFF (deselected). (See the descriptions below.)

Between option selection criteria

If the items are stored in shelf order

Select the **Between** option when pulling items from locations where the items are stored in shelf order.

This allows you to use the distance indicator, alert sounds, indicator lights, and the shelf-order information while you use the DLA to find the item.

If items are stored in random order

Deselect the **Between** option when pulling items from locations where the items are not stored in shelf order.

With this function OFF, the distance indicator and shelf-order information will not appear. This eliminates false readings on the distance indicator, alert sounds, indicator lights, and shelving information.
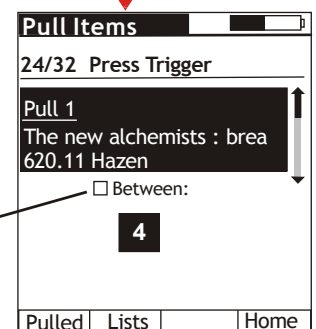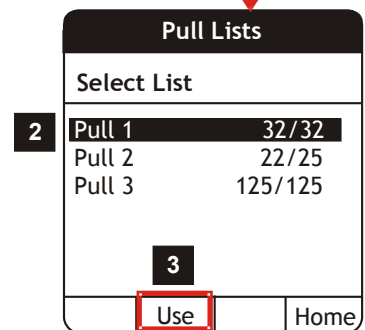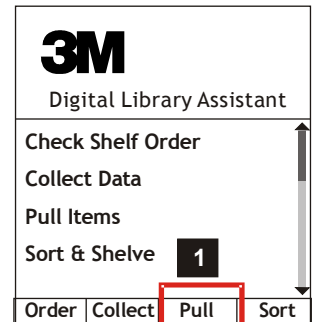
Step 2—Use the DLA to find items on the pull list

1. Use the scroll buttons to move down the list and select the item that you want to pull.

2. Locate the shelf area where the item should be located.

    This is the area where you will start using the DLA.

3. Press the trigger and use the DLA to locate the pull item.

    The method used to locate the item varies depending on whether the **Between** option is ON or OFF. (See the descriptions below.)

Finding items with the Between option ON (selected)

The distance indicator and shelf-order information only appear if the item on the pull list is also on a shelf-order list on the same memory card.

a) Use the distance indicator to determine how close you are and in which direction to move the DLA.

The DLA also displays shelf-order information (the two items that should be on either side of the pull item's shelf location).

ⓘ To find the approximate location, press the trigger and move the DLA down the left sides of the shelves until the indicator light turns from yellow to red. At that point, you know that the item (or position) is somewhere between the last yellow indication and the red indication. (See Using the Change Security function on page 85.)

b) When the DLA reads the pull item's tag, it plays a rapid series of high-toned beeps.
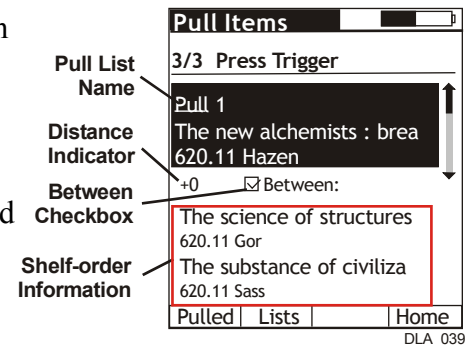
Distance Indicator

+   The DLA is reading items that are to the right of the correct location of the pull item.

-   The DLA is reading items that are to the left of the correct location of the pull item.

If the item is not shelved correctly

If the DLA finds the proper shelf location but the item is not there, the tone and light alternate between yellow/red and the shelf-order information appears. (This indicates that the item is missing or misshelved).

If you think that the item is misshelved, use the DLA to read the shelves near the correct location.

Finding items with the Between option OFF (deselected)

When the DLA reads the pull item's tag, it plays a rapid series of high-toned beeps and all three lights illuminate.

The distance indicator and shelf-order information are not displayed.

Pull List Name

Between Checkbox

```
Pull Items          ▮▮▮
3/3  Press Trigger
Pull 1
The new alchemists : brea
620.11 Hazen
          ☐ Between:

Pulled | Lists |        Home
```
DLA_038

If the item is not shelved correctly

If you move the DLA past the proper shelf location, there will be no indication from the DLA.

If you think that the item is misshelved, use the DLA to read the shelves near the correct location.
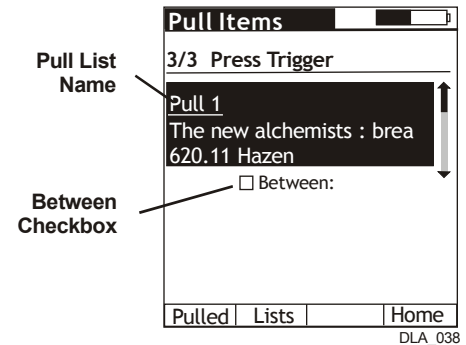
4. If you cannot locate the item, use the scroll button to select the next item on the list and repeat steps 1-3.

Step 3—Remove the pulled items from the pull list

As you locate items, you can remove them from the pull list.

- After you have pulled all the items that you were able to locate, you can import the pull-list results using Data Manager software.

- When you import pull-list results, Data Manager software creates a text file that includes the Item IDs of all the items that you removed from the pull list.

```
Pull Items          ▮▮▮
3/3  Press Trigger
Pull 1
The new alchemists : brea
620.11 Hazen
+0      ☑ Between:
The science of structures
620.11 Gor
The substance of civiliza
620.11 Sass
Pulled | Lists |        Home
```

Pull-list counter
(items left/original items)

To remove an item from a pull list

1. After you remove the item from the shelf, press Pulled.

   a) The Pull-list Counter shows that one item was found and removed from the pull list.

   b) The selected item is removed from the list and the next item on the pull list appears.

   c) The Undo option appears in the menu.

   If desired, press Undo to restore (add back to the list) the last item that you removed from the pull list.

2. Press the trigger and continue finding other items on the pull list.

```
Pull Items          ▮▮▮
2/3  Press Trigger
Pull 1
The ancient engineers.
620.9 De
_ _     ☑ Between:

Pulled | Lists | Undo | Home
```
DLA_036
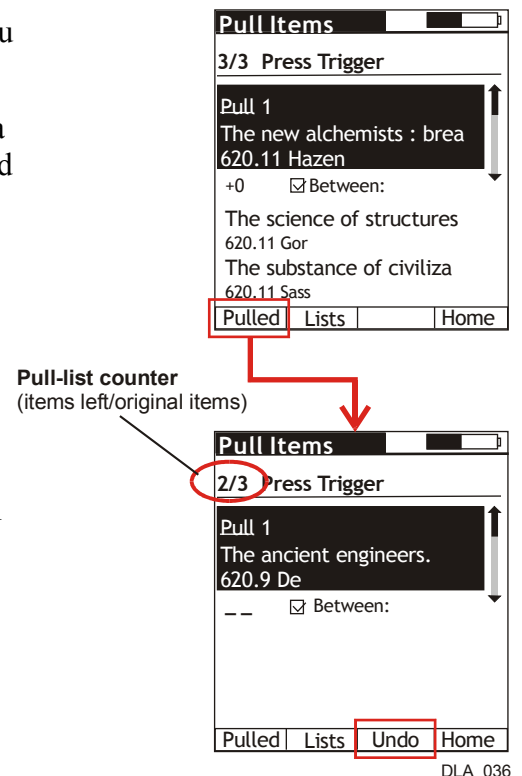
Restoring pull lists

The Restore function allows you to restore the pull list to its original state (number of items).

ℹ️ When you restore a pull list, any items that you pulled and removed from the pull list are added back to

the pull list.

To restore a pull list

1. Display the Pull Lists screen.

2. Select the pull list that you want to restore.

   Use the scroll buttons or stylus to select a list.

3. Press **Restore**.

   The Restore Pull List dialog box appears.

4. Press **OK**.

   The Pull Lists screen appears.

   Any items that you removed from the original pull list are restored (added back to the pull list).

In the example shown at right

Eight items out of 32 were removed from pull list Pull 1 (24/32).

After pressing **Restore**, the eight items that were removed are added back to the pull list (32/32).
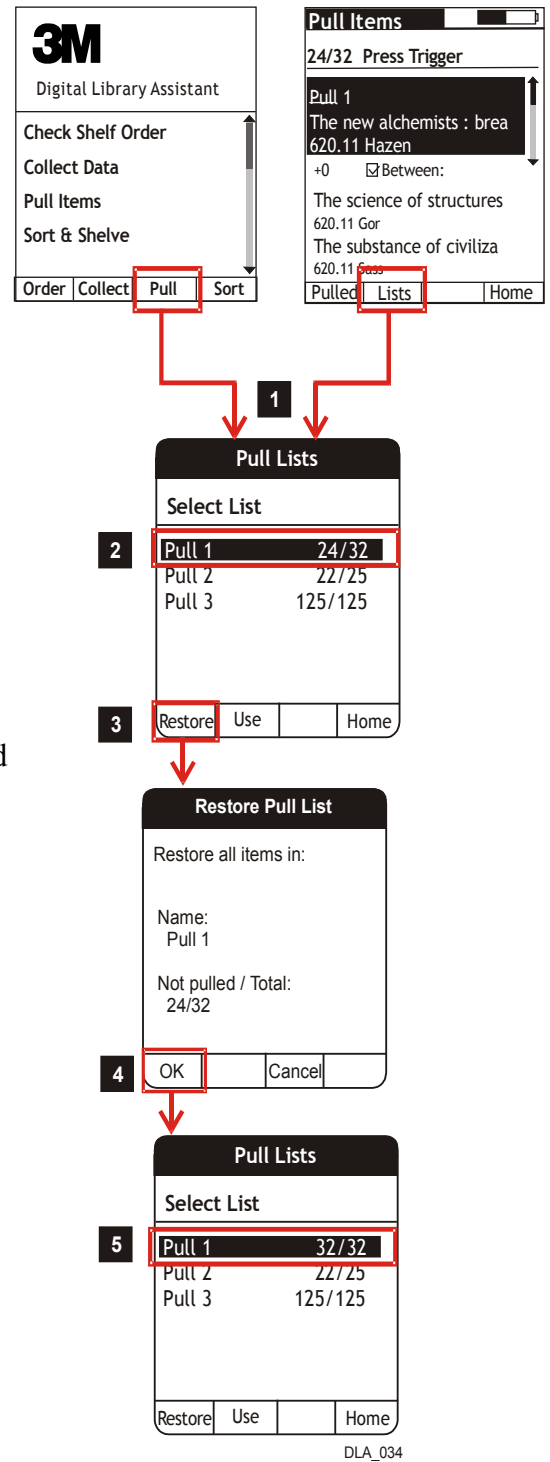
Using the Sort-and-shelve function

The Sort and Shelve function can greatly simplify the process of fine sorting and shelving items.

Overview

This section describes three basic ways to use the Sort-and-shelve function. You may find other ways to use the Sort-and-shelve function.

Shelving-order list

When you use the Sort-and-shelve function to read a group of items, the DLA generates a shelving-order list (the order that you will shelve the items). You can use this list to locate each item and fine sort them onto a shelving cart (in the order that you will shelve them).

When fine sorting items, use the item-location graphics and numbering to help you find each item and determine its shelving order.

- The position of the item-location graphics indicates the item's current location relative to the items that you just read.

- The number in the item-location graphic box indicates the order in which the items should be shelved.

Locating search items

While using the sort-and-shelve function, any items that are on an active search list appear in the shelving-order list. This allows you to process these items before you shelve them.

- The display-list counter shows the number of search-list items that the DLA found.

- Search-list names appear in a box next to each search item in the shelving-order list.

Collecting in-house item IDs

You can save the Item IDs from a shelving-order list (e.g., in-house items) to a collection category. You can then use Data Manager software to import the collected IDs as text files to update your circulation system records.

Finding items

Once you generate a shelving-order list, you can select an item on the list and use the DLA to find that item.

The DLA illuminates all three lights and plays a series of rapid beeps when it finds the item.

Shelve function

Once you generate a shelving-order list, you can select an item and use the Shelve function to help shelve that item.

Display-list features

1. Display list counter—displays the number of search items read / the total number of items read.

2. Shelving-order list – the DLA lists the items in the order that they will be shelved.

3. Item-location graphic—Each item on the list has an item-location graphic that shows the item's current location in relation to the other items read.

   The number in the shelf-location graphic box indicates its shelving order.
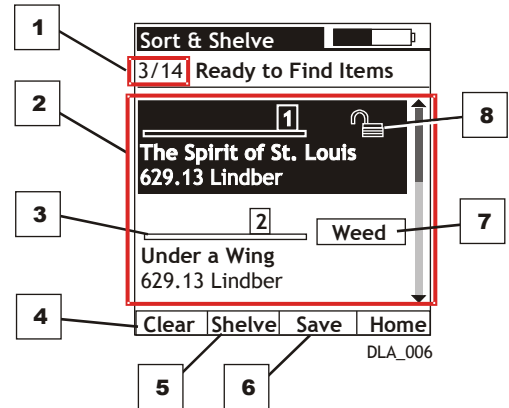
4. **Clear** – press to clear a selected item or press and hold Clear to clear the entire display list.

5. **Shelve** – select an item from the list and press to use the DLA to find the item's shelf location.

6. **Save** – press to save the Item IDs of all the items on the display list to a collection category on the memory card.

7. Search-list name—search-list names appear next to any item read that is on an active search list.

8. Verify icon– the DLA displays a verify icon when it reads any item that meets the verify criteria. (The Verify feature is only available at sites that use RFID Security.)

Method 1—Temporary storage and shelving of returned items

Use this method for shelving groups of returned items.

1. After checking in returned items, place the unsorted items on temporary shelves.

2. Use the Sort-and-shelve function to read the unsorted items on the shelf.

    a) From the Home menu, press Sort.

    b) Press and hold the trigger (or use the trigger lock) and read each item by scanning each shelf from left to right.

    Many users continuously hold the trigger (or use the trigger lock) to read all the shelves.

    c) The DLA creates a numbered shelving-order list from the items that you read.

3. Remove each item from the shelf and place it on a shelving cart in the correct shelving order (as shown on the DLA).

    a) Use the item-location numbering and graphics to help you find each item and determine its shelving order.

    The shelf graphic represents all the items that the DLA read during one pass with the trigger pressed. If you read seven shelves and the position indicator is in the middle of the graphic, the item is somewhere on or near the fourth shelf.

    b) You may want to remove any search items that appear with a search-list name next to them.

    c) If necessary, press and hold the trigger, and use the DLA to find the selected item.

    d) Place each item on the shelving cart in shelving order.

4. Move the shelving cart into the library and shelve the items.

    • Use the scroll buttons to return to the top of the list.

    • If desired, use the Shelving function to help re-shelve the items.
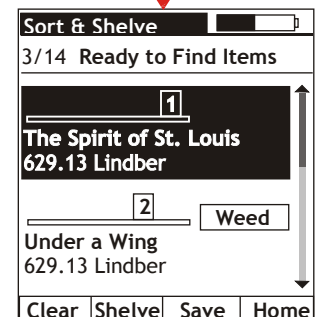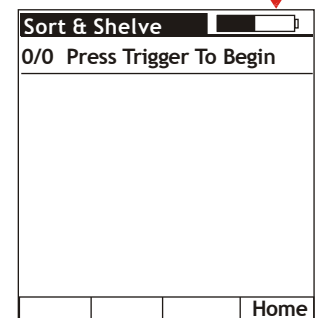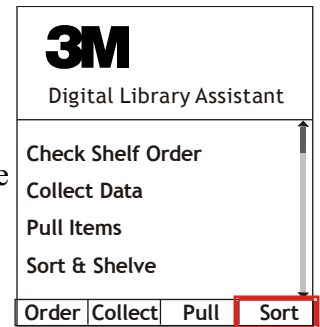
Optional Shelve function

1. Use the Sort-and-shelve function to read the items on the shelving cart.

2. Select (highlight) an item on the shelving-order list.

3. Press **Shelve** and use the DLA to find the correct shelf location for the selected item.

DLA_054.cdr

Method 2—Fine sort "in-house" items on a cart and then shelve

Use this method to shelve "in-house" items that you place on a cart.

The Sort-and-shelve function provides the additional benefit of allowing you to save the item listing in an in-house collection category. You can then use Data Manager software to import the "in-house" collection category to update your circulation system records.

1. Gather all the "in-house" items and place them (unsorted) on a cart.

2. Use the Sort-and-shelve function to read the unsorted "in-house" items that you placed on a cart.

    a) From the Home menu, press **Sort**.

   b) Press and hold the trigger (or use the trigger lock) and read each item by scanning the shelves of the cart from left to right in sequence.

    Do not release the trigger between shelves.

    c) The DLA creates a numbered shelving-order list from the items that you read.

    d) The shelving-order graphic displays the location of the items as if they were all on a single shelf.

    To interpret this display, you will need to consider the sequence of cart shelves you scanned.

    For example, if you scanned two shelves and the display graphic shows the item near the middle of the shelf, you should find that item near the end of the first shelf that you scanned, or near the start of the second shelf that you scanned.

3. Rearrange the items on the cart in shelving order. (You may want to use two carts, one for the unsorted items and one for the fine-sorted items.)

    a) Use the item-location numbering and graphics to help you find each item and determine its shelving order.

    b) You may want to remove any search items that appear with a search-list name next to them.

    c) Place the items on the shelving cart in shelving order.

4. Move the shelving cart into the library and shelve the items.

    Use the scroll buttons to return to the top of the list.
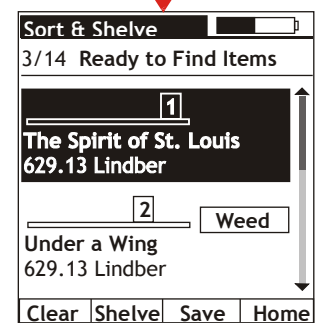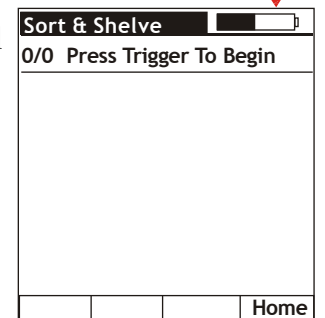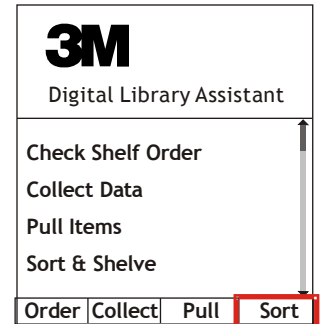
Optional- If you are shelving "in-house use items"

Save the Item IDs from the "in-house" use items to a collection category. See Step 2—Save the collected data to a collection category on page 66 for more information.

Method 3—Place unsorted items on a cart and shelve

You can use this method for "in-house" items or any other group of unsorted items that you want to shelve. For example, you can use this method to shelve items directly from an unsorted or rough-sorted cart.

1. Place unsorted items onto a cart.

2. Use the Sort-and-shelve function to read the unsorted "in-house" items that you placed on a cart.

   a) From the Home menu, press **Sort.**

   b) Press and hold the trigger (or use the trigger lock) and read each item by scanning the shelves of the cart from left to right in sequence.

   Do not release the trigger between shelves.

   c) The DLA creates a numbered shelving-order list from the items that you read.

   d) The shelving-order graphic displays the location of the items as if they were all on a single shelf.

   To interpret this display, you will need to consider the sequence of cart shelves you scanned.
   For example, if you scanned two shelves and the display graphic shows the item near the middle of the shelf, you should find that item near the end of the first shelf that you scanned, or near the start of the second shelf that you scanned.

3. Move the shelving cart into the library.

4. Use the shelving-order list to assist you in shelving the items on the cart.

   a) Use the item-location numbering and graphics to help you find the next item for shelving from the cart.

   b) If desired, remove any search items that appear with a search-list name next to them.

5. Optional—Press **Shelve** and use the DLA to find the correct shelf location for the selected item.
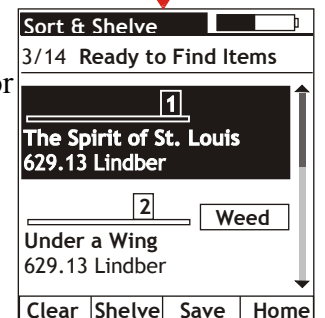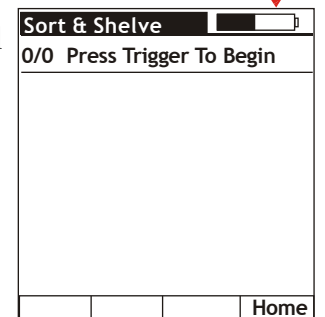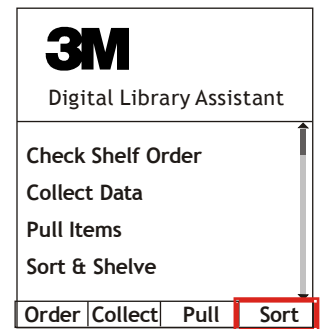
DLA_054.cdr

Using the Find Items function

The Find Items function provides a quick way to use the DLA to find items without having to use Data Manager software to create a pull list or search list. This function uses a simple user-defined search function (Specify Find Criteria) to find any item on a shelf-order list that is on the DLA's memory card.

To use the Find function

Step 1—Use the Specify Criteria screen to enter the item that you want to find

1. From the Home screen, press **Find.**

2. Create a temporary find list (similar to a pull list) that includes the item(s) that you want to find.

   a) Tap one of the following buttons:

   ◆ Item ID

   ◆ Primary Info

   ◆ Secondary Info

   b) Use the keyboard screen to enter unique find criteria (numbers or letters) that occur at the beginning of the selected field.

   If you enter multiple find criteria, all find criteria must be matched.

   c) Tap **Done.**

   d) If desired, repeat steps a-c to define additional Find criteria.

Find criteria

• The find criteria must occur at the beginning of the field(s).

• The Primary and Secondary find criteria are not case sensitive. Item ID criteria are case sensitive.

• Because a search starts at the beginning of a field, you must enter all parts of the field that occur at the beginning (including any articles such as "a", "the", and "an").

   In the example shown on this page, the call number of the item was known so it was entered in the Enter Secondary Info field.

3. Press **Find**.
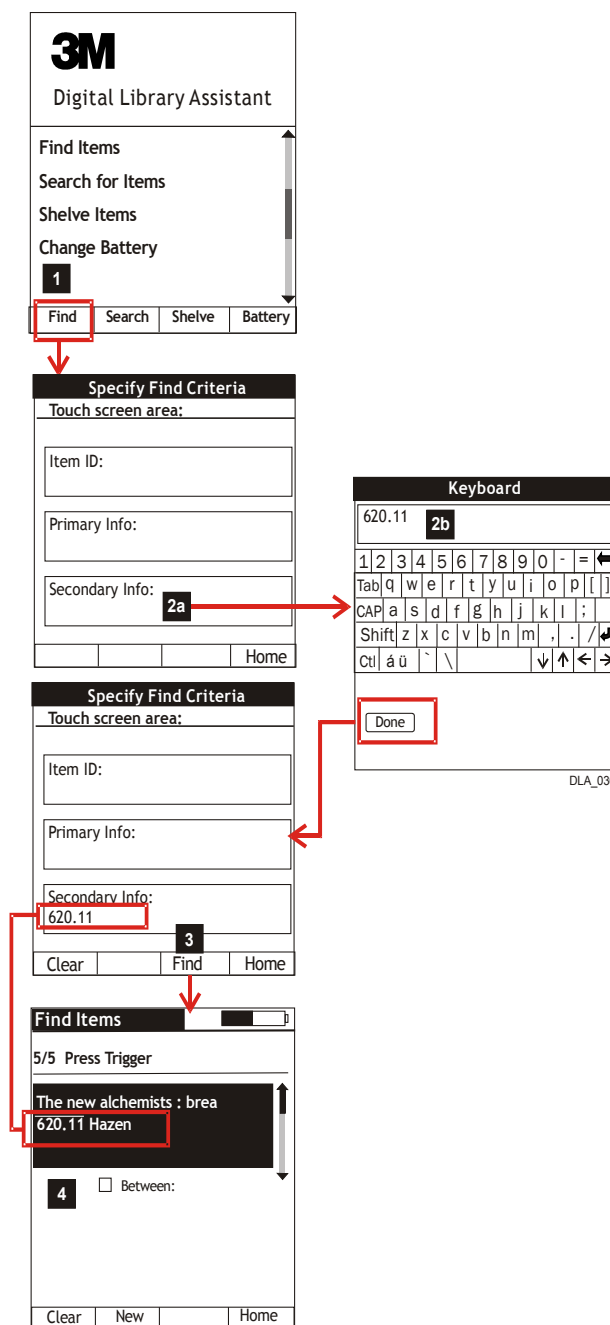
The software searches the lists currently on the memory card for any items that match the find criteria.

4. If the DLA finds matches, the Item information appears on the screen.

   If the DLA finds multiple matches, use the scroll buttons to view other items.

Step 2—Use the DLA to help locate items

The Verify option is disabled when using the Find Items function.

1. If necessary, use the scroll buttons to select the item that you want to find.

2. Turn the **Between** option ON or OFF.

   - Deselect the Between checkbox if you are trying to find an item in a location where the items are not in shelf order.

   - Select the **Between** checkbox if you are trying to find an item in a location where the items are in shelf order.

   [*i*] If the item that you wish to find is not on a shelf-order list the **Between** option will not be available.

   Note: Leave the Between checkbox deselected if you are trying to find an item in a location where the items are not in shelf order (such as a pre-shelving or processing area).

3. Locate the shelf area where you believe the item(s) are located.

4. Press and hold the trigger (or use the trigger lock) and begin to read the shelf.

   - If the **Between** option is ON, the distance indicator, LED indicators, and alert beeps will tell you how close you are to the area where the item is expected to be. (Note: shelf-order information may be incorrect if the items are not in the correct location or if the area is not in shelf order.)

   - The DLA will indicate if it reads any of the items on a find list. For example, if your find list contains multiple copies of the same title, the DLA indicates if any of the copies are read.

     Note: When you select the **Between**: checkbox, the distance indicator shows how close you are to the correct location and provides shelf-order information.

5. If the DLA reads an item on the find list, remove the item from the shelf and press **Clear**.

   - The DLA removes the find item from the list and the next item appears on the screen.

   - To remove all the items from the find list, press and hold the **Clear** button.

6. If the DLA finds the proper shelf position but the item is not there, the tone and the light alternates between yellow and red and the shelf-order information appears on
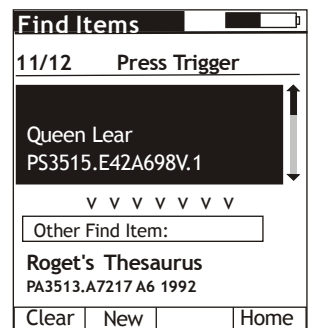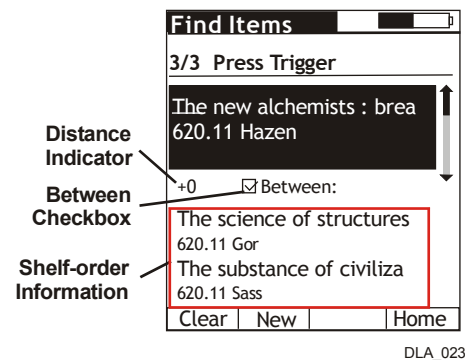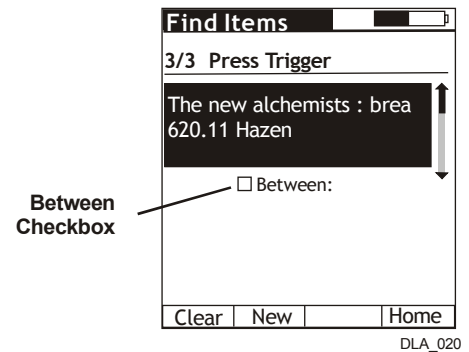
the screen (indicating that the item is missing or misshelved).

If you think that the item is mis-shelved, use the DLA to read the shelves near the correct location to see if you can locate it.

Note: When reading the shelves to locate the first item on the find list, the DLA displays the **Other Find Item** box if it reads another item on the current find list.

7. Press **New** to return to the Specify Find Criteria screen and specify new find criteria.

Using the Search for Items function

The Search for Items function can quickly check a group of items for any items that may be on any active search list.

i The DLA only detects items that are on an active search list. See Deactivating search lists on page 27 for more information.

Procedure

1. From the Home screen, press Search.

2. Pull the trigger and use the DLA to read the items.

   • Whenever the DLA detects an item on an active search list, the three lights will turn on and the DLA emits an alert sound.

   • The DLA displays item information and the search-list name for each search item that you read.

   i The Verify option is disabled when using the Search for Items function.

3. Remove each search item or items with blank tags as they appear.

Note: Search items found during a search do not show the shelf location.

DLA_067

Step 1—Use the DLA to find the correct shelf

1. From the Home screen, press **Shelve**.

2. Use the DLA to read the item that you want to shelve.

   a) Hold the item in your hand.

   b) Place the DLA antenna against the left side of the item.

   c) Press the trigger.

   ◆ The item should appear on the display.

   ◆ If the verify option is enabled, the DLA displays a verify icon for each item that meets the verify criteria. If the item is on an active search list, the verify icon is not shown. The Verify feature is only available at sites that use RFID Security.

3. Use the DLA's indicator lights to find the correct shelf for the item.

   a) Start at the top shelf and use the DLA to read the first book on each shelf.

   Indicator Lights

   ◆ Before Correct Shelf = Yellow Light
     (slow, high-toned beeps)

   ◆ After Correct Shelf = Red Light
     (slow, low-toned beeps)

   b) Continue reading the first book on each shelf until the Red light and low tone indicate that you are past the correct shelf.
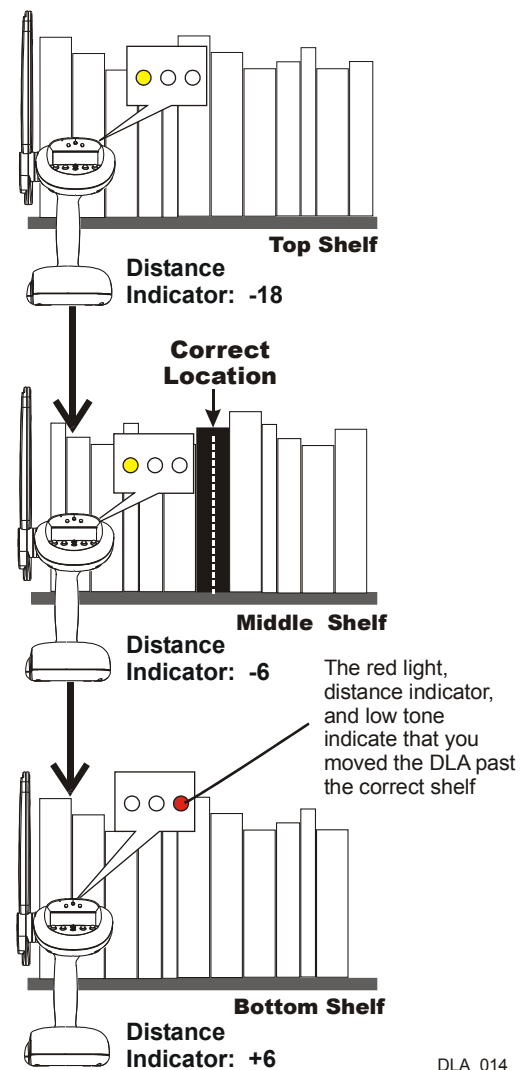
Step 2—Use the DLA to find the shelf location

1. Use the DLA to start reading the shelf.

2. Use the indicator lights, alert sounds, and the distance indicator number to find the correct location.

   The distance indicator number can help you quickly determine how close the DLA is to the correct location.

3. When the DLA is at the correct location:

   • The Yellow, Green, and Red lights are all ON.

   • The DLA emits fast, high-toned beeps.

   • The Goes Between area of the display shows the surrounding items.

   • The distance indicator number is approximately zero.

DLA_050

DLA_019

DLA is left of the correct location	DLA is at the correct location	DLA is right of the correct location
Yellow Light Slow, high-toned beeps	Yellow+Green+Red Lights Fast, high-toned beeps	Red Light Slow, low-toned beeps

Using the Change Security function

This function enables you to scan one or more items to change their security status from secure to unsecure, or from unsecure to secure.

Note: The DLA will only attempt to set security on items that are not in the selected security state. The list that is built during the scan contains only the items that the DLA attempts to set. The counters at the top of the screen are 1) the number of items that were unsuccessfully set, and 2) the number of items that the DLA attempted to set. The Scanned field displays the total number of items seen by the DLA, whether the DLA attempted to set security or not.

Procedure

1. From the Home screen, press **Security**.

2. Press **Secure** or **Unsecure** to select the operation you wish to perform on one or more items.

   The DLA will display an open or closed padlock symbol to represent the security status the items will have after they have been scanned.

3. Pull the trigger to begin the scan. Each item will be entered into a list.

   ℹ The last screen in the example shows two lines of Item ID information displayed. If Location Descriptions are used by the library, a third line containing the location description will be displayed below the item information.

4. When you are finished, pull the trigger to end the scanning process.

5. If you wish to remove an item from the list of scanned items, scroll to the item using the scroll buttons or the scroll bar and press **Clear.**

6. If you wish to save the current list of items to a collection category, press Save.

7. Press **Home** to exit.
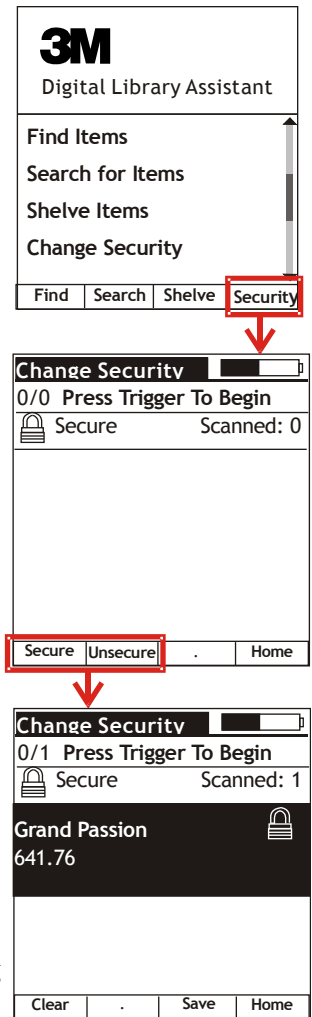
DLA_067a

Using the Show Item Info function

This function enables you to quickly scan a single item and display detailed item information.

Procedure

1. From the Home screen, press **Info**.

   As shown in the example, the Show Item Info screen displays labels for eight types of item information.

   ℹ️ The **Location ID** and **Location Description** fields apply only to libraries that use Location tags.

2. Pull the trigger and scan an item.

   The screen will display item information for the scanned item.

   An Item not in database message will appear in the **Secondary Info** field if the item is not recognized.

3. You may toggle the **Labels/Values** button to easily identify specific item information.

4. Press **Home** to exit.
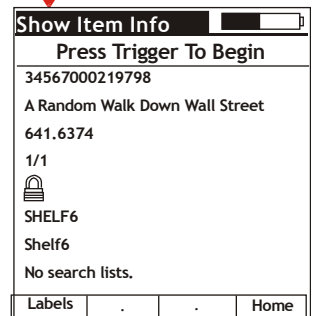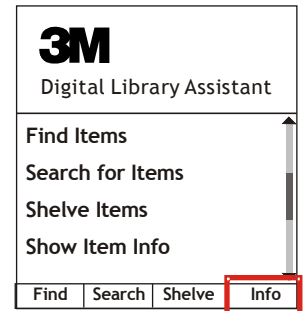
DLA_067b

Only for libraries using location tags

Location tags are used by many libraries, especially larger facilities, to clearly identify specific areas in a building such as individual shelving units, groups of units, and areas located on different floors or wings throughout the facility.

If location tags are used with 3M™ Digital Data Manager software and the DLA, Data Manager export-format parameters are used to prepare location barcodes and descriptions for display on the DLA.

When location tags are used, the DLA displays corresponding location information near the top of the screen and/or directly below the primary and secondary information. As shown in the example:

DLA_067c

- Primary Information: The Age of Reason

- Secondary Information: 641.76

- Location Description: Floor 2 Shelf 10

Three DLA functions designed specifically for location-based processing are described on the following pages:

- Check Location

- Check Location+Order

- Inventory Location

Using the Check Location function

Note: This function applies only to libraries using location tags.

This function enables you to perform two tasks:

scan a shelf and locate items that are in the wrong location, exactly the same as the procedure on the previous page, and

shelve items that are in the correct location but are out of order.

Procedure

1. From the Home screen, press **Loc+Order**.

    As shown in the example, the first Check Location+ Order screen is waiting to scan a Location tag first, followed by items on a shelf associated with that Location tag.

2. Pull the trigger and scan the Location tag.

    The screen will display the Location tag's description on the second line (Shelf 6 in the example).

3. Scan the items on the shelf. When you are finished, pull the trigger to finish scanning.

    The screen will display items that are in the wrong location, plus items that are in the right location but in the wrong order.

    If you wish to save a list of the displayed items, press Save.

4. At this point, you may choose to Find Item or Shelve.

    To find the item, refer to steps 4 through 7 on the previous page.

    To shelve the item, proceed to step 5.

5. Press **Shelve** to shelve the item.

    The Shelving screen will display the item and two items it should go between.

6. Clear the currently displayed item and repeat this process for any remaining items in the list.

7. Press **Home** to exit.

Using the Check Location+Order function

Note: This function applies only to libraries using location tags.

This function enables you to perform two tasks:

- Scan a shelf and locate items that are in the wrong location, exactly the same as the procedure on the previous page, and

- Shelve items that are in the correct location but are out of order.

Procedure

1. From the Home screen, press **Loc**+**Order**.

    As shown in the example, the first Check Location+ Order screen is waiting to scan a Location tag first, followed by items on a shelf associated with that Location tag.

2. Pull the trigger and scan the Location tag.

    The screen will display the Location tag's description on the second line (Shelf 6 in the example).

3. Scan the items on the shelf. When you are finished, pull the trigger to finish scanning.

    The screen will display items that are in the wrong location, plus items that are in the right location but in the wrong order.

    If you wish to save a list of the displayed items, press Save.

4. At this point, you may choose to Find Item or Shelve.

    To find the item, refer to steps 4 through 7 on the previous page.

    To shelve the item, proceed to step 5.

5. Press **Shelve** to shelve the item.

    The Shelving screen will display the item and two items it should go between.

6. Clear the currently displayed item and repeat this process for any remaining items in the list.

7. Press **Home** to exit.

DLA_067e

Using the Inventory Location function

Note: This function applies only to libraries using location tags.

This function enables you to a) collect item IDs, and b) automatically assign all scanned items to a specific location ID in the library. Location information is displayed on the second line from the top, and primary and secondary information are displayed for each item.

Procedure

1. Select one or more items that you wish to scan and assign to a specific location ID in the library.

2. From the Home screen, press **Inventory.**

   As shown in the example, the first Inventory Location screen is waiting for you to scan the Location tag.

3. Pull the trigger and scan the Location tag.

   The screen displays the Location tag's description on the second line (Shelf 6 in the example).

4. Scan the items that you want to assign to the Location tag you scanned in Step 2. When you are finished, pull the trigger to finish scanning.

   The screen will display a list of scanned items, with primary and secondary information displayed for each item.

5. To view an abbreviated list (titles only), press View. Press View again to view primary and secondary information for each item.

6. If you need to delete one or more items from the list, move through the list using the scroll buttons until an item you wish to delete is highlighted. Press **Clear** to delete the item.

7. To a) assign all scanned items to the Location tag you scanned in Step 3 and b) save the list of collected item IDs, press Save. Your new list will be saved to the memory card.

8. Press **Home** to exit.
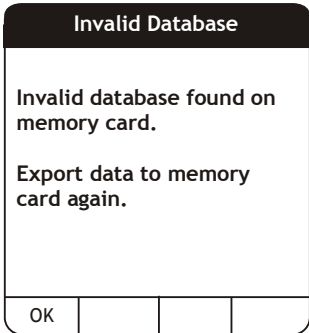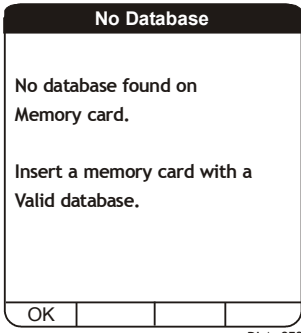
Troubleshooting

This section includes solutions to some common problems that may occur.

DLA startup problems

Problem	Solution
The DLA does not appear to work. The power will not come on (screen remains blank). Lines appear on display or the display appears distorted. The DLA Home screen does not appear.	Perform the DLA Reset Procedure described in the *3M™ Handheld RFID Reader Owner's Manual*. Insert a fully charged battery into the DLA and follow the startup instructions (See the *3M™ Handheld RFID Reader Owner's Manual*.)
The DLA displays "No Database" or "Invalid Database" messages when you insert a memory card. **Invalid Database** **Invalid database found on memory card.** **Export data to memory card again.** OK DLA_061 **No Database** No database found on Memory card. Insert a memory card with a Valid database. OK DLA_053	Either of these two messages is usually the result of corrupted data on the memory card. **Problem** This data corruption is usually the result of removing the memory card from the memory-card drive before the Data Manager export is complete. -or- Not using the Windows Eject command before removing the memory card from the Data Manager memory-card drive. **Solutions** Try the export procedure again. If the DLA continues to display database error messages when you insert the memory card, reformat the memory card. (See the *3M™ Handheld RFID Reader Owner's Manual* for format instructions.) *i* 3M recommends using only SanDisk memory cards and SanDisk memory-card readers for use with the DLA and Data Manager software.
Some of the information on the DLA display is missing. For example, the first line (primary information) may be missing but the second line is okay.	Check the Data Manager software export log for instances of missing primary and/or secondary information fields. The error log allows you to trace the problem back to an individual record. Check for missing primary and/or secondary information fields in the list files generated by your circulation system. You may want to correct any errors in your circulation system item records. Occasionally, a corrupted memory card can result in missing display information. If this occurs, format the memory card. See the *3M™ Handheld RFID Reader Owner's Manual* for information.

Problem	Solution
The DLA displays incorrect item information. For example, the DLA displays a title where there should be an author.	Start Data Manager software, check (preview) the export format that you assigned to the list. If the export format is set up correctly, check for problems in the various lists generated from your circulation system.
If the DLA indicates a misshelved item but the item is shelved correctly.	**Catalog errors** Check the spine label to make sure it matches the item data displayed on the DLA. If the two are different, the circulation system record may have an error or the spine label may be incorrect. The call number in your circulation system database may be incorrect. **Other** The shelf-order list (exported from Data Manager) may be out of order, or the items are shelved differently than what the shelf-order list indicates. Make sure that the shelf-order lists in the Data Manager screen are in the order that matches the physical shelving of items. Thin items: In some situations (such as large groups of thin items,) you can change the item-width setting. If you are reading thin items and the item-width setting is set to medium or thick, you may experience excessive false shelf error alerts.
An item appears to be out of order but the DLA indicates that it is correctly shelved.	The DLA will not report any shelf-order errors that occur within the order limit range assigned to the Item Width Setting. If you use the thin setting for normal or thick items, you may notice reduced accuracy (some detectable shelf-order errors may not be reported).
The DLA is finding excessive shelf-order errors.	If you use the thick or medium order-limit setting for thin items, you may experience excessive false shelf-order errors for items that are in the correct position. The call number in your circulation system database may be incorrect. The shelf-order list(s) (exported from Data Manager) may be out of order, or the items are shelved differently than what the shelf-order list indicates. Thin items: In some situations (such as large groups of thin items,) you can change the Item Width Setting.
"Item not in database" message appears.	The order and search lists on the memory card do not include this item. Check your Data Manager software for the following: Check the Data Manager export log to make sure that you exported the correct shelf-order lists to the memory card.

Problem	Solution
	Check the Data Manager software setup to make sure that any new circulation system records were added to the shelf-order and/or search lists. This usually requires generating new lists from your circulation system and exporting them to a memory card.
	If applicable, make sure that the correct barcode filter was exported to the memory card. In addition, you can use the DLA's admin menu Barcode Filter Test to test the barcode filter that is on the memory card.
	"Item not in database" message will not affect the data collection function. You can still collect data and save it to the memory card.
The Find function does not locate the item.	The item that you are trying to find must be on one of the shelf-order or search lists located on the memory card.
	The find criteria must occur at the beginning of the field(s).
	If a title is entered as find criteria, you must include all the characters at the beginning of the title (including any articles such as "a", "the", and "an").
DLA is not reading any tags	Make sure the Tag Protocol setting is set for the type of tags used at your site. For more information on Tag Protocol settings, see Changing the Tag Protocol setting on page 34.
The DLA is not reading all of the items.	Determine which items are not being read and/or why they aren't being read:
	Metal shelf dividers – items must be separated by 0.5 in. (1.3 cm) from metal shelf dividers.
	Metallic book covers – metallic materials used in some book covers can interfere with tag reading.
	Improper antenna positioning – see Shelf reading basics on page 36 for more information.
	Moving the DLA too fast – move the DLA at a rate of about one item per beep when the pacing tone is heard. (See Shelf reading basics on page 36 for more information.)
	Make sure the Tag Protocol setting is set for the type of tags used at your site. For more information on Tag Protocol settings, see Changing the Tag Protocol setting on page 34.
	Damaged tags
	Missing tags
	Thin items
Battery life seems too short (Model 802)	Handheld Model 702 and Model 802
	Excessive use of the screen backlight option will reduce battery life.
Battery life seems too short (Model 803/804)	Handheld Model 803/804 hardware
	When not in use, remove the battery to conserve the

Problem	Solution
	charge.
	Start each day with a fully charged battery.
	If your site has a Handheld Model 803/804 and a Handheld Model 702 or Model 802, do not use the batteries that came with the Model 702/802 in the newer Handheld Model 803/804. They will not last as long as the batteries shipped with the Model 803/804.
	Always use 2400mA/hr or greater batteries in the Model 803/804.

DLA staff training

About staff training

Use the following DLA Training Outline to develop your in-house staff-training program. This outline gives you the main training points in a logical sequence.

You may want to add to this outline and develop some examples that you can demo in the stacks.

Time—Allow approximately 1.5 hours for basic training with a class size of two people per DLA. Of this time, approximately one hour is spent performing tasks with the DLA.

Class size – because training involves a lot of practice with the DLA, you may want to limit class size to no more than four. Larger class sizes can reduce the effectiveness of the training.

It is best to train between two and four people (with no more than two people per DLA). By training more than one person at a time, the students will learn from each other's questions.

Staff training outline

Overview of operation (data source, etc.)

1. Provide an overview of the DLA's physical components

   Buttons, trigger, antenna, memory card, battery, etc.

2. Explain the kinds of tasks that can be performed using the DLA.

   Shelf order, finding missing items, etc.

3. Explain how the DLA works—uses item identifier read from the tag to look up item data (from the circulation system) on the memory card.

   The DLA uses data from the circulation system (in the form of user-created lists) that are exported by Data Manager software, onto a memory card. The DLA can read data from and write data to the memory card.

   Each tag includes an Item ID that should correspond to an item record on the memory card.

4. A 32-MB memory card can store information for 200,000+ items.

   If necessary, larger cards are available.

Battery management

Refer to the *3M™ Handheld RFID Reader Owners Manual* for information on battery management.

To avoid draining the battery, remove the battery during long-term storage (more than one week).

1. Battery life expectations:

   a) Approximately four hours of trigger time per fully charged battery.

   b) Expect approximately 6+ hours of real usage time in most scenarios.

Using the screen light option will reduce the amount of real usage time.

    c) When stored on the shelf (not used) the DLA slowly uses the battery.

    The DLA battery will last approximately one week when stored in the DLA.

2. Battery replacement procedures:

    a) Replace the battery after a session of heavy use or if the battery indicator shows less than 50% of the charge remaining.

    b) During use, the DLA warns the user if the battery level is too low. To avoid possible loss of data, change the battery if the DLA displays a "low battery" message.

    c) Always use the "Change Battery" procedure. (See the 3M™ Digital Library Assistant User Guide.)

    d) Make sure you insert the battery in the direction of the arrow. It is more difficult to insert it backward, but not impossible.

    e) If the user does not perform this procedure correctly (must be changed in less than a minute), they will have to perform a reset.

3. Battery charging procedures:

    a) Light on charger means the following:

        ◆ Green light on empty charger means "charger is plugged into power"

        ◆ Red light means battery is charging.

        ◆ Green light with battery inserted in charger indicates that the battery is fully charged.

    b) It is okay to leave the battery on the charger overnight.

    c) It takes approximately four (4) hours to fully charge a battery.

Memory card procedures

1. Each site should develop a custom work flow-management plan for using the DLA. This plan should include:

    • Decide who will manage the memory cards.

    • A schedule for updating lists (using Data Manager software)

    • Task scheduling, inventory policies, etc.

2. At a minimum, your staff must know where they will get a memory card before using the DLA and where they will take it after working with the DLA.

Using the Check Shelf Order function

Most sites use the Check Shelf Order function on a daily basis. This function is a good choice for training because it combines most of the DLA "best practices."

1. Shelf-reading basics (demo once and then have students start)

    a) Speed of scanning shelves

    b) Antenna positioning for shelves

    c) Trigger operation – both click on/off and standard operation

    d) Meaning of pacing sound and green LED

    e) Separation from metal

    f) "Not in database errors" can occur if you use the DLA to read items that are not on any of the shelf-order lists that you exported to the memory card.

2. Finding misshelved items

3. Finding search items (missing items, etc.)

    All search lists are active at startup.

    Use Setup Lists screen to examine and/or deactivate search lists.

    🛈 It may be useful to create a search list just for training. This list should include items that are shelved in the area where you will be training.

4. Checkshelf alerts (easy to create and demo)

5. Finding catalog errors – useful to demonstrate if you can find one.

    • If the DLA flags a misshelved item that appears to be shelved correctly, look for discrepancies between the call number on the spine label and the call number from the circulation system data (usually displayed on the DLA). If they are different, there may be a problem with the circulation data or the label.

    • If a catalog error (missing barcode, wrong collection code, etc.) causes a record to not be exported in a shelf-order list, the DLA will display the ""not in database" message if it reads this item. To minimize this, always check the export log and correct any catalog errors.

6. Defining the Item Width setting

    • Change for very thin or very thick books

    • Can cause excessive errors or reduced accuracy

7. Using the volume control for audible tones

Other DLA functions (as required)

• Data Collection / Inventory / In-House Use (optional)

• Find Items (optional)

• Pull Items (optional)

• Sort & Shelve (optional)

• Shelve Items (optional)

• Search for Items (optional)

• Change Battery

• Setup Lists (optional)

• Trigger Lock

• Screen Light

Battery replacement

Explain battery replacement procedure outlined in the 3M™ Handheld RFID Reader Owners Manual.

Memory card removal

Only remove a memory card when the DLA displays the Home screen (main menu screen).

Tightening the DLA antenna (for key users/administrators only)

If necessary, the antenna can be gently tightened if it becomes loose during use.

This typically only happens after substantial periods of heavy use.

Warranty

Effective 12-12-05

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3M Service

Information to gather

Before you call, please have the following information available:

- Name, address, and telephone number of your facility

- Model number(s) of equipment you are calling about —and, if applicable, other equipment installed

- Your question(s), or if applicable, a description of the problem or issue you want addressed

3M Service phone numbers

For questions regarding your system, call one of the following numbers.

In the United States	In Canada	In other countries
1-800-328-0067	English 1-800-268-6235 Français 1-800-567-3193	Call your local 3M office.

3M Library Systems Web Site

The 3M Library Systems Web site can be located at http://www.3M.com/library.

For additional information in the United States about 3M Library Systems, go to http://www.3M.com/us/library.

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